May 29, 2015

Mr. Kevin Collins
Geologist, Response and Remediation Program
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King, Jr. Dr., SE, Suite 1054
Atlanta, Georgia 30334-9000

Subject: **AGLC-Augusta MGP Site**
1st Semi-Annual VRP Status Report
Amec Foster Wheeler Project No.: 6122140098

Dear Mr. Collins:

Amec Foster Wheeler Environment and Infrastructure, Inc. is pleased to submit the First Semi-Annual Voluntary Remediation Program (VRP) Status Report on behalf of Atlanta Gas Light Company as required under the VRP for the Former Manufactured Gas Plant (MGP) located in Augusta, GA (HSI #10132) to the Georgia Environmental Protection Division.

Please call me at (770) 421-7022 with any questions concerning this report.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.

David Price, P.E.
Project Manager

Leslie Miller, P.E.
Senior Engineer

cc: Mr. Greg Corbett, PE, AGLC
Mr. Jim Ussery, Joe Tanner and Associates
Mr. Derrick Williams, GAEPD

Attachments: First Semi-Annual VRP Status Report

Correspondence:
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Voluntary Remediation Program
1st Semi-Annual Status Report

Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Prepared for:	Atlanta Gas Light Company Ten Peachtree Pl NE, 17th Floor, Atlanta, Georgia 30309
Date:	May 29, 2015
Prepared by:	Amec Foster Wheeler Environment & Infrastructure, Inc. 1075 Big Shanty Road NW, Suite 100, Kennesaw, Georgia 30144
Project No.:	6122140098

TABLE OF CONTENTS

1.0 PROJECT SUMMARY 1-1

2.0 SITE ACTIVITIES 2-1

2.1 REMEDIAL DESIGN 2-1

2.2 SURFACE WATER EXPOSURE PATHWAY 2-1

2.3 GROUNDWATER AND VAPOR INTRUSION EXPOSURE PATHWAYS 2-3

2.4 SOIL/SEDIMENT EXPOSURE PATHWAY 2-4

3.0 ADDITIONAL QUALIFYING PROPERTIES 3-1

4.0 ADDITIONAL INVESTIGATION 4-1

5.0 VAPOR INTRUSION 5-1

5.1 EXPOSURE ASSESSMENT 5-1

5.2 TOXICITY ASSESSMENT 5-3

5.3 RISK CHARACTERIZATION 5-4

5.4 GROUNDWATER CONCENTRATIONS THAT ARE PROTECTIVE OF RESIDENTIAL INDOOR AIR EXPOSURES 5-4

5.5 UNCERTAINTY ANALYSIS 5-5

6.0 CONCLUSIONS AND RECOMMENDATIONS 6-1

7.0 NEXT SUBMITTAL 7-1

8.0 REFERENCES 8-1

LIST OF TABLES

Table 2-1 Third Level Canal Surface Water Analytical Results
Table 2-2 Groundwater Analytical Results for Galliard Formation
Table 2-3 Groundwater Analytical Results for Bedrock Wells
Table 2-4 Site Delineation and Cleanup Standards
Table 2-5 Surface Soil and Sediment Remediation Summary
Table 5-1 Summary of Groundwater Concentrations
Table 5-2 Residential Assumptions Used in Johnson & Ettinger Model (GW-ADV)
Table 5-3 Calculations of Risk to Indoor Air Concentrations, Resident – Future Inhalation of Indoor Air – Vapor Intrusion
Table 5-4 Summary of Groundwater Remediation Goals Protective of Indoor Air Exposures

LIST OF FIGURES

Figure 1-1 Site Location Map
Figure 1-2 Parcel Block Map – City of Augusta
Figure 2-1 March 2015 Surface Water Sampling Locations
Figure 2-2 Galliard Groundwater Approximate Extent of Dissolved Phase Impacts July 2014
Figure 2-3 Galliard Groundwater Approximate Extent of Dissolved Phase Impacts January 2015
Figure 2-4 Bedrock Groundwater Approximate Extent of Dissolved Phase Impacts July 2014
Figure 2-5 Bedrock Groundwater Approximate Extent of Dissolved Phase Impacts January 2015
Figure 2-6 Site Map Regulatory Status for Soil/Unsaturated Zone
Figure 3-1 Qualifying Properties
Figure 4-1 Planned Additional Geoprobe Investigation Areas
Figure 4-2 Planned Monitoring Well Locations

LIST OF APPENDICES

Appendix A Responses to EPD's December 3, 2014 Comment Letter
Appendix B January 2015 CAER (submitted under separate cover)
Appendix C Closure Approval Letters
Appendix D March 2015 Surface Water Analytical Data
Appendix E Parcel Affidavits and City of Augusta Letter
Appendix F Vapor Intrusion
Appendix G Registered Professional Supporting Documentation

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AGLC	Atlanta Gas Light Company
BDWP	Basis of Design Work Plan
bgs	Below Ground Surface
BPLM	By-Product-Like Material
CAP	Corrective Action Plan
COC	Chemicals of Concern
COPC	Constituents of Potential Concern
COI	Constituents of Interest
CSR	Compliance Status Report
DNAPL	Dense Non-Aqueous Phase Liquid
DPT	Direct Push Technology
EPC	Exposure Point Concentration
EPD	Georgia Environmental Protection Division
ft	Feet
HSRA	Georgia Hazardous Site Response Act
HASP	Health and Safety Plan
HI	Hazard Index
IDM	Investigation Derived Materials
IRIS	Integrated Risk Information System
ISS	In-Situ Solidification
IUR	Inhalation Unit Risk
MGP	Manufactured Gas Plant
NHL	Non-Hodgkin Lymphoma
NPL	National Priorities List
NTU	Nephelometric Turbidity Unit
OU	Operable Unit
PVC	Polyvinyl Chloride
RfC	Inhalation Reference Concentration
RRS	Risk Reduction Standards
SESD	Science and Ecosystem Support Division

Acronym	Definition
SI	Site Inspection
SVOC	Semi-Volatile Organic Compound
TCE	Trichloroethylene
UCL	Upper Confidence Limit
USEPA	United States Environmental Protection Agency
VI	Vapor Intrusion
VIRP	Voluntary Investigation and Remediation Plan
VISL	Vapor Intrusion Screening Level
VOC	Volatile Organic Compound
VRP	Georgia Voluntary Remediation Program
VRPA	Georgia Voluntary Remediation Program Act

GROUNDWATER SCIENTIST CERTIFICATION

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enables me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction. Data contained herein gathered and reported by professionals other than Amec Foster Wheeler Environment & Infrastructure, Inc. are accepted as accurate and have been integrated into this report as such.

Leslie Miller

Leslie Miller, P.E. (Georgia P.E. No. 035713)
Senior Environmental Engineer
Amec Foster Wheeler Environment & Infrastructure, Inc.

5/29/15

Date

Registered P.E.'s Stamp:

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1.0 PROJECT SUMMARY

The former Augusta Manufactured Gas Plant (MGP) is located at the intersection of Walton Way and 8th Street in the City of Augusta, County of Richmond, Georgia (Figure 1-1). Atlanta Gas Light Company (AGLC) owns three parcels of land on which a MGP and ancillary facilities formerly operated, which collectively occupy approximately 3.5 acres (Figure 1-2). These properties as well as those surrounding properties potentially impacted by the former MGP operations are collectively referred to as the "Augusta MGP Site" or the "Site" in this Status Report.

AGLC has performed a series of investigations and implemented numerous Georgia Environmental Protection Division (EPD) approved corrective actions and has addressed the MGP impacts in the unsaturated and saturated zone materials over large areas of the Site and surrounding areas since the mid-1980s. After further evaluation and coordination, AGLC and EPD agreed that the Augusta MGP Site was a candidate for enrollment in the Georgia Voluntary Remediation Program (VRP).

EPD agreed to move the Augusta MGP Site into the VRP upon execution of a new Consent Order and submittal of an acceptable Voluntary Investigation and Remediation Plan (VIRP) by August 28, 2014. The Consent Order was signed by AGLC and EPD and executed on September 23, 2014. AGLC submitted an initial VIRP Application Form and Checklist with associated VRP application fee on August 6, 2014 and the VIRP on August 28, 2014. EPD approved the VIRP and accepted AGLC into the VRP and provided comments on the VIRP in two separate letters dated December 3, 2014.

The December 3, 2014 EPD acceptance letter established the schedule for submittal of progress reports to EPD, which will be December 1st and June 1st annually. The goals of this Status Report are to comply with the June 1, 2015 progress report submittal schedule and to update EPD on the progress of activities at the Site. This report is also provided to document modifications from the initial VIRP submittal, including qualifying additional properties into the VRP, and to address EPD's comments from the December 3, 2014 letter. Responses to EPD's comments are provided in Appendix A. As documented in the reponses, comments not addressed in this report will be addressed in future VRP submittals for the Site.

2.0 SITE ACTIVITIES

Site activities completed during this reporting period are summarized in the following sections. Progress during this reporting period have been primarily focused on finalizing the 60% design for planned remedial activities. Additional activities evaluating applicable exposure pathways have been completed during this reporting period to support progression of the Site through the VRP and to address EPD's comments from the December 3, 2014 letter. In addition, semi-annual groundwater data was collected from existing wells and the results of this sampling have been documented in a corrective action effectiveness report included as Appendix B.

2.1 REMEDIAL DESIGN

Preparation of the 60% remedial design is currently substanitially complete to support implementation of the site-wide in situ solidification (ISS) remedy for the saturated zone source impacts. However, due to recent inquiries by several stakeholders regarding the fate of the former Trinity Church building, AGLC is considering alternative remediation technologies for Block E (Subarea 2) with the building remaining in place. Discussions related to the fate of the buildings will take into consideration several scenarios related to preserving the building while addressing the underlying source impacts. It is still contemplated that the other areas (Subarea 1 and 3) will receive ISS as the final saturated zone source remedy. AGLC will communicate with EPD independent of this status report regarding decisions concerning the former church building, Block E remediation, and any changes to the remedial approach for the other areas.

2.2 SURFACE WATER EXPOSURE PATHWAY

The only surface water feature at the Site is the Third Level Canal, which parallels the Northern Parcel to the west as shown on Figure 1-2. This section has been prepared to document the previous work performed at the Third Level Canal to support that the surface water exposure pathway has been addressed for the Site.

Remediation activities for the Third Level Canal were performed as agreed upon between AGLC and EPD and consisted of the following:

- Known MGP impacted unsaturated soils were excavated and transported to soil stockpile areas for subsequent off site disposal;
- Excavation of the Canal extended to the bottom of visually impacted material or to deeper depths at known impacted areas as identified during the remedial investigation and supplemental soil investigation;
- The Canal excavation was extended to the limits of visually impacted soils. Additionally, outside the Canal excavation the upper two feet of soil from the top of Canal bank to the adjacent property was excavated and replaced with clean soil. In some instances, excavations were extended beyond the limits of visually impacted soils to accommodate Canal improvements;
- Collection of confirmation samples (verification sampling) at the adjacent property boundary to confirm that the adjacent property complied with applicable Risk Reduction Standards (RRS) after removal of soils from Third Level Canal corridor. Property line confirmation samples were obtained in the upper two feet of soil exposed in the excavation sidewalls;
- Backfill with clean, compacted soil; and,
- Canal civil improvements, which consisted of installation of a newly constructed concrete Canal liner, bridge replacement/modifications, and mulch/matting and/or grass seeding on all Canal slopes.

Excavated soils were characterized and transported off-site for disposal. Soil backfill from both on- and off-site sources was placed prior to initiating Canal civil improvements. A 30- to 40-foot wide concrete liner with 3.5- to 9-foot high retaining walls was constructed after backfilling was completed. Unimpacted soils were then placed behind the walls and topped with a 2-foot cap of clean soil.

This corrective action was completed in compliance with the requirements of the Consent Orders with EPD, the EPD approved Basis of Design Work Plan (BDWP) (MACTEC 2002), and the Corrective Action Plan, Augusta MGP Site – Northern Parcel (CAP) (ThermoRetec 1999). In a letter dated March 30, 2009, EPD approved the Corrective Action Closure Report and Compliance Status Report, Third Level Canal, Operable Unit (OU) 3 dated January 16, 2009 and concurred with AGLC's certification. A copy of EPD's letter is provided in Appendix C for reference.

To support elimination of the surface water exposure pathway and address EPD's December 2014 comments, surface water samples were collected from two locations along the Third Level Canal on March 17, 2015. One sample was obtained northwest of the site in Reach G (TLC-001) and the other sample was obtained between the Northern and Western Parcels (TLC-002) as shown in Figure 2-1. As shown in Table 2-1, samples collected from both locations have similar concentrations with most being below the reporting limit and/or instream standards. The exception to this is copper, which has a concentration of 1.65 ug/L at TLC-001 northwest of the Site and 46.2 ug/L at TLC-002 adjacent to the site. With the absence of other Site constituents of interest (COIs), the elevated copper concentration observed at TLC-002 is not likely related to former MGP operations. Analytical laboratory data for TLC-001 and TLC-002 is provided in Appendix D.

Based on the extensive remediation completed to date and current surface water data in the Third Level Canal, which suggests that impacts in surface water are not related to the Site, the surface water exposure pathway for the Site has been addressed to the extent practicable and does not warrant further evaluation under the VRP.

2.3 GROUNDWATER AND VAPOR INTRUSION EXPOSURE PATHWAYS

As discussed in the VIRP, groundwater impacted by COIs is not accessible for direct contact because the aquifers beneath the Site are not used for water supply and the Site and adjacent properties are supplied with municipal water. An updated well survey to verify the number of wells and well uses within the Site vicinity is planned to be completed as discussed in the VIRP and is anticipated to be reported in the second Semi-Annual Status Report.

It is planned that qualifying parcels will have groundwater use restrictions eliminating the ingestion and dermal exposure pathways to groundwater. With these use restrictions in place, vapor intrusion (VI) from groundwater to indoor air will be the primary exposure pathway for potential residual impacts in the upper aquifer post remediation. An updated VI risk assessment has been completed for the Site using the most recent sampling data to represent current conditions. The risk assessment is discussed in Section 5.0.

The most recent groundwater data collected in July 2014 and January 2015 from the Galliard and Bedrock wells is presented in Tables 2-2 and 2-3, respectively. The January 2015 semi-annual sampling report is included as Appendix B. Extent of dissolved phase impacts in the Galliard and Bedrock formations for July 2014 and January 2015 sampling is presented in Figures 2-2 through

2-5. Groundwater will continue to be sampled semi-annually consistent with the current program until construction is initiated. Some wells in the remedial footprint will need to be abandoned due to the construction activities. Additionally, wells located on the Georgia Power property on Block D will need to be abdandoned in the fall of 2015 to accommodate expansion of the Georgia Power Substation. A modified program with a subset of existing wells will be sampled during ISS implementation to continue to evaluate groundwater quality. After implementation of ISS is complete, groundwater flow in the upper aquifer will be altered by the solidified ISS mass. Additionally, permeability and leaching potential will be greatly reduced within the ISS footprint. For these reasons, locations of potential new/replacement wells will be identified after completion of construction activities and after an evaluation of Post ISS groundwater data from the subset of retained wells has been completed. Additional monitoring wells are planned to be installed prior to or during construction activities to address delineation requirements under the Voluntary Remediation Program Act (VRPA) and are described in Sections 4.2 and 4.4. Indication of delineation criteria and cleanup standards used to previously demonstrate compliance are located in Table 2-4 for groundwater.

2.4 SOIL/SEDIMENT EXPOSURE PATHWAY

As documented in the VIRP, the unsaturated soil/sediment exposure pathway has already been remediated as shown in Figure 2-6. The BDWP (MACTEC, 2002) incorporated remedial objectives including removing and/or treating in place all by-product-like material (BPLM) and addressing soil to achieve compliance with the applicable RRS and removing free phase contamination to the extent practicable. Delineation criteria and cleanup standards used to demonstrate compliance are located in Table 2-4 for the soil exposure pathway. Copies of approval letters from EPD and compliance certification for soils/sediments for the Site are included in Appendix C. Table 2-5 provides a summary of documents where the standards/criteria for surface soil and sediments can be found supporting that this exposure pathway has been remediated at the Site.

3.0 ADDITIONAL QUALIFYING PROPERTIES

The properties previously qualifying for the VIRP include parcels 106, 109, 185, 186, 187, 188, 189, 225, 227, 228, 230, 231, 248, 327.2, 327.1, 328, 329, 330, and 374.1 owned by AGL. Walton Way and 8th Street are being added as qualifying for the VRP as shown on Figure 3-1. A letter from the City of Augusta granting AGLC permission to enroll portions of Walton Way and 8th Street into the VRP is included in Appendix E. Appendix E also contains filed declarations and affidavits for the Site as requested by EPD.

All of these properties are either listed on the Georgia Hazardous Site Inventory or otherwise have a release of regulated substances into the environment. None of these properties are listed on the federal National Priorities List, are undergoing response activities required by an United States Environmental Protection Agency (USEPA) order, or are a facility required to have a permit under O.C.G.A 12-8-66. AGLC is the owner of these properties or has express permission of the owner to enroll the qualifying properties in the VRP.

4.0 ADDITIONAL INVESTIGATION

Additional investigation is necessary prior to further remedial actions for characterization and refinement of the remedial footprint and has been revised since the initial submittal of the VIRP. Planned activities currently include: 1) delineation of residual BPLM in Subareas 1, 2 and 3; 2) understanding the extent of possible TCE impacts in groundwater in the Galliard zone from an off-site source in Block C; 3) investigation of potential residual BPLM northwest of the former carwash (Block A) in the areas of MW-502D and MW-603; and 4) investigation delineation of Galliard groundwater impacts in the area north of MW-603; and 5) horizontal delineation of Bedrock groundwater impacts northwest of MW-318. Details of the planned investigations are presented below.

4.1 SOIL SAMPLING FOR VISUAL BPLM ANALYSIS IN SUBAREAS

The planned investigative activities include soil borings for additional characterization and delineation for Subarea 1 (Western Parcel), Subarea 2 (Walton Way), and Subarea 3 (Block E). Initial soil borings will be located based on the observed extent of BPLM as illustrated on Figure 4-1. Additional soil borings will be conducted along the 8th Street/Walton Way intersection, east of the Car Wash area, on the Western Parcel, and surrounding the BPLM areas in Block E at 25 to 50 foot intervals. Supplemental borings will be performed as needed based on visual observations of the soil cores. Up to 96 borings are anticipated to be completed as part of the planned investigative activities.

The soil borings will be installed using direct push technology (DPT) and extended through the Alluvial and Gaillard formations to the top of Saprolite. Soil cores will be collected by advancing a five-foot polyethylene lined dual tube stainless steel sampler through the designated sample depth interval. Soil cores will be collected continuously from ground surface to the top of Saprolite (approximately 30-feet (ft) below ground surface (bgs)). Upon extraction from the sampler, each soil core will be examined for the presence of visual staining. Soil cores will be logged by a qualified professional in accordance with the Site Specific MGP soil logging protocol (RETEC 2003).

All down-hole equipment used for the collection of soil cores will be decontaminated prior to advancing each individual borehole to prevent cross-contamination. The work will be conducted in accordance with a site specific Health and Safety Plan (HASP). Soil cuttings and other investigation derived materials (IDM) generated during the investigation will be containerized in 55-gallon drums, properly labeled, and left adjacent to the groundwater treatment building pending analytical results and final disposition. Prior to initiating DPT operations, applicable permits will be received and the utilities protection center will be contacted to obtain utility clearance for the site. A private utility locator will also be employed to clear the area around each of the boring locations.

4.1.1 REPORTING

Once visual observations of the soil cores are logged, the information will be tabulated and the figures summarizing the investigation will be updated to incorporate the newly acquired data, including the interpreted extent of BPLM from the visual analysis. The BPLM additional delineation will then be used to refine the ISS remediation boundary and will be reported in the subsequent semi-annual report.

4.2 BLOCK C MONITORING WELL INSTALLATION

Three new monitoring wells will be installed in Blocks C and J for the purpose of better understanding trichloroethylene (TCE) impacts. The locations for these wells will be selected to complement the existing monitoring well network to better understand TCE impacts and groundwater flow direction within the Galliard Formation. These wells will be constructed comparable to MW-401D and terminate at a depth of approximately 36-ft bgs. The proposed monitoring well locations are presented on Figure 4-2 and may be adjusted contingent upon access and conditions encountered in the field.

The new monitoring wells will be installed using a Roto-Sonic drill rig equipped with 6x4 drilling rods. During advancement of the borehole, soil cores will be collected continuously in 10-foot polyethylene soil core sample liners, and logged in accordance with the specific MGP soil logging protocol. Analytical testing of soils from these three monitoring well borings will not be performed.

The borings will be advanced through the Alluvium and Gaillard formations to the top of Saprolite (approximately 36-feet bgs) and the wells will be installed as described below.

All down-hole equipment used for monitoring well installation will be decontaminated prior to drilling each individual well to prevent cross-contamination. The work will be conducted in accordance with a site specific HASP. Soil cuttings, well development water, and other IDM generated during installation of the monitoring wells will be containerized in 55-gallon drums, properly labeled, and left adjacent to the groundwater treatment building pending analytical results and final disposition. Prior to initiating drilling, applicable permits will be received and the utilities protection center will be contacted to obtain utility clearance for the site. A private utility locator will also be employed to clear the area around each of the proposed monitoring well locations.

The monitoring wells for TCE will be constructed of 2-inch I.D. flush joint threaded Schedule 40 polyvinyl chloride (PVC) with ten feet of 0.010-inch machine slotted screen and will be installed in accordance with Science and Ecosystem Support Division (SESD) guidance document SESDGUID-101-R0 *Design and Installation of Monitoring Wells*.

Newly installed wells will be completed at the surface as lockable flush mounted wells. At least 24 hours after installation, the newly installed wells will be properly developed to remove sediment and drilling fluids in preparation for groundwater sample collection. Well development will consist of pumping of the well while monitoring the water quality parameters of temperature, pH, specific conductivity and turbidity. Well development will be considered complete when a minimum of five well volumes of water have been removed, the water quality parameters have stabilized, and the turbidity is less than 10 nephelometric turbidity units (NTU).

Prior to sampling for TCE, the wells will be purged using low-flow purging methodology as described in USEPA Region 4's FBQSTP *Groundwater Sampling Operating Procedure (Groundwater Sampling OP;* SESDPROC-301-R1). Groundwater quality parameters, including turbidity, specific conductance, temperature, and pH will be monitored during well purging. Purging will continue until the monitored water quality parameters stabilize, indicating the presence of representative formation water, at which point the samples will be collected. Samples will be collected for TCE analysis using USEPA method 8260 in appropriate environmental grade sample containers, properly labeled, placed immediately on ice, and shipped under proper chain-

of-custody protocol for overnight delivery to the laboratory within the allowable sample holding time.

4.2.1 REPORTING

Once the analytical laboratory reports for field sampling activities have been received, the data will be tabulated, and the figures summarizing the groundwater testing for the newly installed monitoring wells will be updated to incorporate the newly acquired data and reported to EPD in the subsequent semi-annual status report. The groundwater data will then be used to better understand TCE groundwater impacts.

4.3 SOIL SAMPLING FOR VISUAL BPLM ANALYSIS IN BLOCK A

Dense non-aqueous phase liquid (DNAPL) has been observed in MW-502D and MW-603 during the 2014 and 2015 Semiannual Corrective Action Effectiveness sampling. Additional investigation will take place in the areas of MW-502D and MW-603 in the former carwash area of Block A. Investigative activities will include soil borings for additional visual characterization of BPLM and delineation in this area. Initial soil borings will be located as illustrated on Figure 4-1. Supplemental borings will be performed as needed based on visual observations of the soil cores. Up to 8 borings are anticipated to be needed to complete the planned investigative activities in this area. It should be noted that MW-502D was not able to be located during the most recent inspection conducted on May 7, 2015 due to other construction activities in the area. An attempt to locate MW-502D will be made during the planned additional investigation activities. If the well cannot be located, appropriate next steps will be identified in the subsequent semi-annual status report.

The soil borings will be installed using DPT and extended through the Alluvial and Galliard formations to the top of Saprolite. Soil cores will be collected by advancing a five-foot polyethylene lined dual tube stainless steel sampler through the designated sample depth interval. Soil cores will be collected continuously from ground surface to the top of Saprolite (approximately 30-ft bgs). Upon extraction from the sampler, the soil core will be examined for the presence of visual staining. Soil cores will be logged by a qualified professional in accordance with the Site Specific MGP soil logging protocol (RETEC 2003).

All down-hole equipment used for the collection of soil cores will be decontaminated prior to advancing each individual borehole to prevent cross-contamination. The work will be conducted in accordance with a site specific HASP. Soil cuttings and other IDM generated during the investigation will be containerized in 55-gallon drums, properly labeled, and left adjacent to the groundwater treatment building pending analytical results and final disposition. Prior to initiating DPT operations, applicable permits will be received and the utilities protection center will be contacted to obtain utility clearance for the site. A private utility locator will also be employed to clear the area around each of the boring locations.

4.3.1 REPORTING

Once visual observations of the soil cores are logged, the information will be tabulated and the figures summarizing the investigation will be updated to incorporate the newly acquired data, including the interpreted extent from the visual analysis. The additional delineation will then be used to evaluate appropriate corrective action, if necessary, in this area and will be reported in the subsequent semi-annual status report.

4.4 GALLIARD AND BEDROCK MONITORING WELL INSTALLATION

Additional wells in both the Galliard and Bedrock formations are needed to complete horizontal delineation. One new well will be installed north of MW-603 for purpose of completing delineation of the dissolved groundwater impacts in the Galliard, and one new monitoring well will be installed northwest of MW-318 to complete horizontal delineation of the dissolved groundwater impacts in the bedrock. These locations for these wells will be selected to complement the existing monitoring well network. The Galliard well will be constructed comparable to MW-603 and will terminate at approximately 30-ft bgs. The Bedrock well will be constructed comparable to MW-318 and terminate at approximately 90-ft bgs. The proposed monitoring well locations are presented on Figure 4-2 and may be adjusted contingent upon access and conditions encountered in the field.

The new monitoring wells will be installed using a Roto-Sonic drill rig equipped with 6x4 drilling rods. During advancement of the borehole, soil cores will be collected continuously in 10-foot polyethylene soil core sample liners, and logged in accordance with the specific MGP soil logging

protocol. Analytical testing of soils from these monitoring well borings will not be performed. The boring for the Galliard well will be advanced through the Alluvium and Gaillard formations to the top of Saprolite (approximately 30-feet bgs) and the well installed as described below. The boring for the Bedrock well will be advanced through the Alluvium, Gaillard, and Saprolite formations and the well will be installed in the bedrock formation as described below.

All down-hole equipment used for monitoring well installation will be decontaminated prior to drilling each individual well to prevent cross-contamination. The work will be conducted in accordance with a site specific HASP. Soil cuttings, well development water, and other IDM generated during installation of the monitoring well will be containerized in 55-gallon drums, properly labeled, and left adjacent to the groundwater treatment building (with the other well cuttings from Block C) pending analytical results and final disposition. Prior to initiating drilling, applicable permits will be received and the utilities protection center will be contacted to obtain utility clearance for the site. A private utility locator will also be employed to clear the area around each of the proposed monitoring well locations.

The Galliard and Bedrock monitoring wells will be constructed of 2-inch I.D. flush joint threaded Schedule 40 PVC with ten feet of 0.010-inch machine slotted screen and will be installed in accordance with SESD guidance document SESDGUID-101-R0 *Design and Installation of Monitoring Wells*. The boring for installation of the Bedrock well will require installation of an 8-inch diameter temporary surface casing to the top of Saprolite. The boring will then be advanced to depth of 90 feet bgs, to core barrel resistance on hard rock, using a 4-inch casing pipe and over-reaming the hole to a diameter of 6 inches.

The newly installed wells will be completed at the surface as lockable flush mounted wells. At least 24 hours after installation, the newly installed wells will be properly developed to remove sediment and drilling fluids in preparation for groundwater sample collection. Well development will consist of pumping of the well while monitoring the water quality parameters of temperature, pH, specific conductivity and turbidity. Well development will be considered complete when a minimum of five well volumes of water have been removed, the water quality parameters have stabilized, and the turbidity is less than 10 NTU.

Prior to sampling the Bedrock well northwest of MW-318 for benzene and naphthalene and the Galliard well north of MW-603 for Site COIs, the wells will be purged using low-flow purging methodology as described in USEPA Region 4's FBQSTP *Groundwater Sampling Operating Procedure (Groundwater Sampling OP;* SESDPROC-301-R1). Groundwater quality parameters, including turbidity, specific conductance, temperature, and pH will be monitored during well purging. Purging will continue until the monitored water quality parameters stabilize, indicating the presence of representative formation water, at which point the samples will be collected. Samples will be collected for Site chemicals of concern (COC) analysis using USEPA methods listed in Table 2-4 in appropriate environmental grade sample containers, properly labeled, placed immediately on ice, and shipped under proper chain-of-custody protocol for overnight delivery to the laboratory within the allowable sample holding time.

4.4.1 REPORTING

Once the analytical laboratory reports for field sampling activities have been received, the data will be tabulated, and the figures summarizing the groundwater testing for the newly installed monitoring wells will be updated to incorporate the newly acquired data and reported to EPD in the subsequent semi-annual status report. If delineation is not achieved, appropriate next steps will be evaluated based on the analytical data received and path forward for further delineation of the Galliard and/or Bedrock groundwater.

4.5 VACCUM TRUCK PUMP OUT OF MW-603

MW-603 and MW-502D were installed to monitor impacts downgradient of the Georgia Power electrical vault in Block A. There is currently an accumulation of DNAPL within the screened interval of the wells at a depth of 19 to 23 feet below ground immediately above the saprolite. EPD has requested corrective measures for DNAPL observed in MW-603 and MW-502D. A vacuum truck will be deployed to attempt to remove product in MW-603. The well will then be monitored to observe how quickly, if at all, product re-enters the well and then appropriate next steps will be identified. Since MW-502D has not had continuous DNAPL reported, an interface probe will be used to evaluate conditions in MW-502D and then determine appropriate next steps.

MW-205 has also recently had observations of DNAPL (on interface probe) from the most recent sampling event in January 2015. An interface probe will also be deployed at MW-205 to evaluate conditions and determine appropriate next steps. Product and water removed from MW-603 will be properly containerized and disposed of at the on-site treatment system. Prior to vacuum removal, a sample of the observed product in MW-603 will be collected, if possible, and analyzed for site COIs. If product is observed in MW-502D and MW-205, sampling will also be attempted and the samples analyzed for site COIs from these wells. Results from this corrective action will be reported in the subsequent status report.

5.0 VAPOR INTRUSION

As discussed in Section 2.3, with groundwater use restrictions in place, VI from groundwater to indoor air will be the driving exposure pathway for potential residual impacts in the upper aquifer post ISS. To support addressing this exposure pathway, the potential for volatile compounds in groundwater to migrate into the indoor air of future potential overlying residential buildings has been evaluated. This hypothetical "vapor intrusion" risk evaluation conservatively assumes that residential houses may be constructed directly over the groundwater plume at the Site without the use of vapor barriers or other engineering controls (ECs) designed to prevent vapor intrusion exposure. Samples from groundwater monitoring wells screened in the alluvium, saprolite, and Galliard water zones collected during the last four semi-annual sampling events (July 2013, January 2014, July 2014, and January 2015) were considered representative of current groundwater conditions. Five volatile organic compounds (VOCs) and 16 semi-volatile organic compounds (SVOCs) were detected in these groundwater samples. The maximum detected VOC and SVOC groundwater concentrations are listed in Table 5-1 and were conservatively used in the initial screening step of the risk evaluation.

5.1 EXPOSURE ASSESSMENT

In order to identify constituents of potential concern (COPCs) for the vapor intrusion exposure pathway, the maximum detected current groundwater concentrations were compared to target groundwater concentrations from the USEPA's Vapor Intrusion Screening Level (VISL) Calculator Version 3.3 (USEPA, 2014a). The output from the VISL calculator and the chemical and physical parameters used for the initial screening assessment are provided in Appendix F; the VISLs are summarized in Table 5-1. These VISLs are based on a residential exposure scenario with target carcinogenic risk of 10^{-5} and target hazard index of 1. As a result of this conservative screening step, five constituents (benzene, ethylbenzene, TCE, xylenes, and naphthalene) were identified as groundwater-to-indoor air COPCs requiring further evaluation.

These particular groundwater COPCs are consistent with the findings of previous indoor air sampling conducted at the Site by Environmental Cost Management, Inc. (ECM, 2013). The ECM evaluation included: the collection of indoor air and ambient air samples, comparison of the sample data with risk-based target levels and typical indoor air concentrations, and a forensic

(source identification) analysis of the indoor air samples and groundwater samples (ECM, 2013). The ECM report concluded that:

- only benzene was detected at concentrations greater than the risk-based target levels
- the VOCs in the indoor air samples were derived from fuel hydrocarbons and not from manufactured gas plant sources and
- the detected indoor air concentrations of benzene were not significantly different from the ambient air sample concentrations.

In accordance with USEPA Region 4 recommendations (USEPA, 2014b), groundwater exposure point concentrations (EPCs) for the five identified COPCs in this current vapor intrusion risk evaluation were based on the 95 percent Upper Confidence Limit (UCL) of the arithmetic mean for data collected within the core of the groundwater plume. The groundwater plume was defined by groundwater monitoring wells with detected concentrations greater than the VISLs. This resulted in using the available data for eleven groundwater monitoring wells (MW-12, MW-205, MW-304, MW-311, MW-401SAP, MW-401D, MW-502D, MW-505D, MW-600, MW-601, and MW603). Nine of these wells are located in the Galliard formation and 2 in saprolite. The most shallow groundwater zone, the alluvial zone, was not significantly impacted. By using the two lower zones that are more distant from the ground surface, the exposure point concentrations are potentially overly conservative. The analytical data for one well, MW-21, was not included in the evaluation. Because there are non-detect wells between the Site and MW-21, the constituents detected in MW-21 are considered to be related to sources other than the Site. For each of the COPCs, the 95 percent UCL of the mean concentration was calculated using the USEPA's ProUCL Software, Version 5.00 software (USEPA, 2013). The analytical data used for the ProUCL program and the reports generated with ProUCL are presented in Appendix F.

The COPCs in groundwater were evaluated as a potential source of volatile emissions into a hypothetical future residential-use building located directly over the groundwater plume. USEPA's Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (USEPA, 2002) was used as a primary guidance document for this evaluation. In accordance with the guidance, site-specific future indoor air concentrations at the site were estimated, using USEPA's Johnson and Ettinger Model for Subsurface Vapor Intrusion into Buildings (GW-ADV, Version 3.1) (the J&E Model) (USEPA, 2004) and the 95 percent UCLs of the COPCs present in underlying groundwater.

Default and site-specific modeling parameters were used for estimating indoor air concentrations (Table 5-2). Based on site-specific depth to groundwater measurements in January 2015, the average depth to groundwater was estimated as 8.12 feet. The soil type at the Site is sandy clay loam and a soil classification of SCL was used for the purposes of estimating indoor air concentrations from subsurface vapor intrusion. The dimensions of a default residential building from the J&E model (32.8 feet by 32.8 feet with 12 foot ceilings) and a default air exchange rate of 0.25 exchanges per hour were assumed. Basement construction was assumed based on local building practices. The results of the J&E modeling for each COPC are located in Appendix F. The modeled indoor air EPCs are summarized in Table 5-3.

5.2 TOXICITY ASSESSMENT

Toxicity values [Inhalation Reference Concentrations (RfCs) and Inhalation Unit Risk (IURs)] used in this evaluation were obtained from the USEPA Integrated Risk Information System (IRIS) and USEPA's January 2015 Regional Screening Level Table (USEPA, 2015). IRIS has released a Toxicity Assessment for TCE that recommends TCE be addressed as a potential mutagen with risk for kidney-related impacts being assessed using age-specific adjustment factors and with liver and non-Hodgkin lymphoma (NHL) risk addressed using the standard carcinogenic equations. Separate TCE IURs have been derived for the mutagenic kidney and non-mutagenic liver-NHL endpoints. Table 5-3 includes the age-specific adjustment factors used to adjust the TCE exposure intakes.

The toxicity values used in this assessment are listed on Table 5-3. The RfC is used to estimate non-carcinogenic inhalation hazards. The RfC is an estimate of the daily exposure to the human population (including sensitive subgroups such as children and the elderly) that is likely to be without an appreciable risk of deleterious effects. The estimated hazard is compared to a target hazard index (HI) of one. In accordance with the Georgia Hazardous Site Response Act (HSRA), cumulative hazards less than one are not likely to be associated with systemic or non-carcinogenic health risks.

The IUR is characterized as an upper-bound estimate designed to be protective of the majority of the human population. Using the chemical-specific and endpoint-specific IURs, the total excess cancer riskfor the indoor vapor intrusion pathway were calculated for both mutagenic (TCE) and cancer risks (all COPCs) and the combined risks were compared to a target risk of

10^{-5}. If the total excess cancer risk for residents is less than 10^{-5}, risk is considered to be in the acceptable range under the Georgia HSRA Rule.

5.3 RISK CHARACTERIZATION

The modeled indoor air concentration of the COPCs were used to assess potential indoor air exposures and calculate incremental risks and hazards related to potential vapor intrusion into future residences at the Site for 30-year residents (Table 5-3). The estimated total excess cancer risk from vapor intrusion in indoor air is 2×10^{-4} for residents, which is greater than the target risk of $1x10^{-5}$. The majority of the hypothetical future cancer risk is associated with vapor intrusion of benzene, ethylbenzene, and naphthalene in groundwater. The estimated HI for vapor intrusion to indoor air is 3 for residents, which is greater than the threshold of 1. The majority of the hypothetical future hazard is associated with vapor intrusion of benzene in groundwater.

5.4 GROUNDWATER CONCENTRATIONS THAT ARE PROTECTIVE OF RESIDENTIAL INDOOR AIR EXPOSURES

The selected COCs for the site are those constituents that potentially contribute to a hazard index greater than 1 or total excess cancer risk greater than 1×10^{-5}. The particular groundwater COCs identified for the AGLC Augusta Site for protection of indoor air are benzene, ethylbenzene, and naphthalene.

The calculation of risk-based groundwater concentrations that are protective of indoor air for these COCs are presented in Table 5-4. These protective risk-based groundwater concentrations, also known as “remediation goals”, were back-calculated using the same assumptions used to estimate potential current risks and hazards associated with potential vapor intrusion from groundwater. Because the three COCs each act on different target organs, the non-carcinogenic remediation goals were calculated for a HI of 1. Because all three of the COCs are carcinogens, the carcinogenic remediation goals were calculated for a target risk of 3.3×10^{-6} so that the total excess cancer risk would not exceed 1×10^{-5}. The more conservative of the carcinogenic and systemic remedial goals for each compound were selected as the groundwater concentrations that are protective of indoor air exposures without need of vapor barriers or other ECs to prevent vapor intrusion exposure.

5.5 UNCERTAINTY ANALYSIS

The intent of the current study was to evaluate the potential for vapor intrusion into hypothetical future residences built above the groundwater plume at the Site without the use of vapor intrusion barriers or other (ECs) to prevent vapor intrusion exposure. Conservative risk-based screening criteria were used to complete a preliminary evaluation of risks and hazards for hypothetical future onsite residents. Key uncertainties associated with an inhalation risk evaluation include the estimation of representative exposure concentrations and exposure intakes, the choice of toxicity values, and the approach to estimating and aggregating risks (USEPA, 2009). Exposure point concentrations were based on wells located in the Galliard and Saprolite groundwater zones. To impact surface receptors, concentrations in these two zones would have to migrate through the overlying alluvial groundwater zone. Thus, the exposure point concentrations potentially overstate the groundwater source concentrations that could impact indoor air. If vapor transport is limited by the alluvial aquifer, then risk for future receptors would be negligible because the concentrations in the alluvial aquifer are less than vapor intrusion screening levels.

The assessment assumes future residents will be present 350 days a year with cumulative exposure durations of 30 years for residential adults and residential children to be consistent with the residential exposure duration used in the HSRA Rule. For the mutagenic risk calculation for TCE, the exposure is age-adjusted (6 years as a child, 12 years as an adolescent, and 12 years as an adult). These assumptions would tend to overestimate risks because residential tenure in one location averages approximately nine years (USEPA, 2011). In addition, the detected constituents are potentially biodegradable, and biodegradation and attenuation are not addressed by the J&E model.

The potential for increased sensitivity of children exposed to TCE was addressed through a quantitative adjustment of the toxicity values for TCE to account for early life susceptibility. Therefore, this assessment should be protective and not underestimate risks for early life exposures. (USEPA, 2015).

5.6 SUMMARY

To summarize, maximum detected concentrations of constituents detected in the upper three groundwater zones were conservatively compared to USEPA vapor intrusion screening levels for groundwater (Table 5-1). Based on this comparison, five volatile compounds were selected as COPCs for the VI pathway. The 95 percent UCL of the arithmetic mean for concentrations in 11 wells within an area of higher groundwater concentrations were used as the exposure point concentrations for VI modeling. Using the J&E model and default residential exposure assumptions (Table 5-2), the COPC UCLs were used to predict indoor air concentrations within a future hypothetical residence. The modeled indoor air concentrations were then used to estimate chemical-specific hazard quotients and excess cancer risks for future hypothetical residents. Three of the five COPCs (benzene, ethylbenzene, and naphthalene) had estimated excess cancer risks greater than 10^{-6} and contributed to a total excess cancer risk of 2×10^{-4}. Only benzene had a non-cancer hazard quotient greater than 1 (Table 5-3). Based on the results of the VI risk characterization, groundwater remediation goals protective of the indoor air vapor intrusion pathway were calculated for benzene, ethylbenzene, and naphthalene (Table 5-4). These remediation goals can be used to monitor improvement of the groundwater quality post-ISS. However, if residential properties were to be located above the groundwater plume in the future and groundwater concentrations remain at levels greater than the groundwater remediation goals, there is a potential for vapor to present an indoor air inhalation risk for future residents. Therefore, it is recommended on a case-specific basis, that vapor mitigation be incorporated into the design for future residential buildngs if located within the impacted groundwater area where groundwater concentrations remain greater than the groundwater remediation goals protective of indoor air exposures.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the recent Site assessments and activities, we offer the following conclusions and recommendations:

- The exposure pathways for surface water, unsaturated soil and sediment have been addressed and does not need to be further evaluated in the VRP for the Site.

- With groundwater use restrictions in place, VI from groundwater to indoor air may be the remaining complete exposure pathway for potential residual impacts in the upper aquifer post ISS. Based on the VI risk characterization, three VI COPCs (benzene, ethylbenzene, and naphthalene) may pose a VI risk for future residents and will be considered with the Site groundwater remedy.

- It is recommended on a case-specific basis that vapor mitigation be incorporated into the design for future residential buildings where groundwater concentrations remain impacted at concentrations greater than the groundwater remediation goals protective of indoor air exposures.

- Groundwater will continue to be sampled semi-annually consistent with the current program until construction is initiated. A modified program with a subset of existing wells will be sampled during ISS implementation to continue to evaluate groundwater quality.

- Locations of potential new/replacement wells will be identified after completion of construction activities and after an evaluation of Post ISS groundwater data from the subset of retained wells has been completed.

- Additional investigation for characterization and refinement of the remedial footprint as described in Section 4.0 will be performed prior to remedial actions.

- An updated well survey to verify the number of wells and well uses within the Site vicinity will be completed.

7.0 NEXT SUBMITTAL

As required by EPD, semi-annual progress reports must be submitted to EPD every June 1st and December 1st beginning in 2015 and ending in 2020, unless a compliance status report (CSR) is submitted and approved prior to 2020. A report for the second semi-annual period will be submitted by December 1, 2015 and is planned to include the following activities:

- Semi-annual groundwater monitoring reporting
- Results from completed additional investigation activities
- Updated well survey for the Site
- Update on planned corrective action of Subareas 1, 2, and 3
- Qualify additional Site parcels into the VRP

8.0 REFERENCES

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TABLES

Table 2-1
Third Level Canal Surface Water Analytical Results

Constituent	Instream Standard[1]	Reporting Limit	MDL	TLC-001 3/17/2015		TLC-002 3/17/2015	
Acetone	NA	50	3.2	<50		<50	
Benzene	51	5.0	0.61	<5.0		<5.0	
Carbon Disulfide	NA	5.0	1.9	<5.0		<5.0	
Ethylbenzene	2100	5.0	0.29	<5.0		<5.0	
Methylene Chloride	590	5.0	0.94	<5.0		<5.0	
Toluene	5980	5.0	0.49	<5.0		<5.0	
Trichloroethylene	30	5.0	0.80	<5.0		<5.0	
Xylenes (total)	NA	NA	NA	NA		NA	
Acenaphthene	990	0.50	0.0053	<0.50		<0.50	
Acenaphthylene	*	1.0	0.0075	<1.0		<1.0	
Anthracene	40000	0.05	0.010	<0.050		<0.050	
Benzo(a)anthracene	0.018	0.05	0.011	**0.027**	J	**0.026**	J
Benzo(a)pyrene	0.018	0.05	0.016	<0.050		<0.050	
Benzo(b)fluoranthene	0.018	0.10	0.011	**0.030**	J	**0.035**	J
Benzo(g,h,i)perylene	*	0.10	0.040	<0.10		<0.10	
Benzo(k)fluoranthene	0.018	0.05	0.018	**0.028**	J	**0.028**	J
Chrysene	0.018	0.05	0.0097	**0.032**	J	**0.029**	J
Dibenzo(a,h)anthracene	0.018	0.10	0.015	<0.10		<0.10	
Fluoranthene	140	0.10	0.0053	**0.084**	J	**0.051**	J
Fluorene	5300	0.10	0.0041	<0.10		<0.10	
Indeno(1,2,3-cd)pyrene	0.018	0.05	0.035	<0.050		<0.050	
Naphthalene	NA	0.50	0.021	<0.50		<0.50	
Phenanthrene	*	0.05	0.0047	**0.056**		**0.033**	J
Pyrene	4000	0.05	0.013	**0.051**		**0.039**	J
Antimony	640	5.00	0.117	**0.125**	J	<5.00	
Arsenic	10	5.00	0.167	**0.289**	J	**0.213**	J
Barium	NA	10.0	0.144	**15.0**		**12.7**	
Beryllium	*	1.00	0.0949	<1.00		<1.00	
Cadmium	0.15	0.700	0.122	<0.700		<0.700	
Chromium III	42	5.00	0.171	**0.299**	J	**0.267**	J
Chromium VI	11	10.0	1.30	<10.0	H	**2.20**	JH
Copper	5	2.00	0.204	**1.65**	J	**46.2**	
Cyanide	5.2	10	5	<10.0		<10.0	
Lead	1.2	1.00	0.309	**0.537**	J	<1.00	
Mercury	0.012	0.20	0.04	<0.20		<0.20	
Nickel	29	5.00	0.173	**0.236**	J	**0.203**	J
Selenium	5	5.00	0.365	<5.00		<5.00	
Thallium	0.47	1.00	0.0949	<1.00		<1.00	
Vanadium	NA	5.00	0.106	**0.488**	J	**0.344**	J
Zinc	65	10.0	3.44	**5.41**	J	<10.0	

Prepared by: ADB 3/27/2015
Checked by: RRY 3/27/2015

All values are in µg/L
[1] Standards found in Georgia Rules §391-3-6-.03 (Georgia Department of Natural Resources Water Use classifications and Water Quality Standards)
MDL: Method Detection Limit
NA: Not applicable
J: Estimated value detected below Reporting Limit
H: Holding times for preparation or analysis exceeded
BOLD=Analyte was detected above laboratory detection limit
Analyte concentration exceeds Instream Standard
Detection limit exceeds the Instream Standard

Table 2-2
Groundwater Analytical Results for Galliard Formation

Category			VOCs								SVOCs									
Constituent			Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Toluene	Trichloroethylene	Xylenes, total	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene
Type 1 RRS			4,000	5	4,000	700	5	1,000	5	10,000	2,000	10	10	0.1	0.2	0.2	10	10	0.2	0.3
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MW-12	1/14/2015	N	< 50	**3,500**	< 5.0	**930**	< 5.0	**720**	< 5.0	**940**	**69**	**1.7**	**1.5**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/14/2015	DUP-03	< 50	**3,600**	< 5.0	**990**	< 5.0	**740**	< 5.0	**980**	**73**	**3.3**	**1.9**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 1000	**5,700**	< 100	**1,700**	< 100	**660**	< 100	**1300**	**110**	**20**	**2.4**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	DUP-02	< 1000	**5,500**	< 100	**1,600**	< 100	**680**	< 100	**1300**	**120**	**21**	**2.6**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	**2,200**	< 5.0	**720**	< 5.0	**330**	< 5.0	**530**	**71**	**10.0**	**1.7**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	DUP-02	< 50	**2,200**	< 5.0	**680**	< 5.0	**330**	< 5.0	**520**	**68**	**12.0**	**1.8**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	**1,900**	< 5.0	**540**	< 5.0	**160**	< 5.0	**350**	**23**	**1.0**	**0.74**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	DUP-02	< 50	**1,900**	< 5.0	**530**	< 5.0	**200**	< 5.0	**330**	**25**	**1.0**	**0.73**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	**220**	< 5.0	**93**	< 5.0	< 5.0	< 5.0	**8.2**	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22
	1/9/2013	DUP-02	< 100	**120**	< 5.0	**52**	< 5.0	< 5.0	< 5.0	**6.4**	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22
	7/25/2012	N	< 100	**73**	< 5.0	**39**	< 5.0	< 5.0	< 5.0	< 5.0	**33**	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
	7/25/2012	DUP-05	< 100	**69**	< 5.0	**34**	< 5.0	< 5.0	< 5.0	< 5.0	**20**	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5
	1/18/2012	N	< 50	**100**	< 6.0	**120**	< 10	< 3.3	< 1.3	< 2.0	**32**	**1.8**	**0.83**	< 0.097	**0.17 J**	< 0.097	< 0.097	< 0.097	< 0.044	< 0.097
	1/18/2012	DUP-03	< 5.0	**71**	< 0.60	**76**	< 1.0	**0.90 J**	< 0.13	**3.3 J**	**52**	**4.8**	**1.9 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.45	< 1.0
MW-19	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.092**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.15**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.1**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.11**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/25/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/19/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	**9.4**	< 0.20	< 0.098	< 0.098	< 0.098	**0.10 J**	**0.13 J**	**0.20**	< 0.098	< 0.098	**0.11 J**	< 0.098
MW-21	1/12/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**49**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**150**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**130**	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**86**	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/18/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	**13**	< 0.20	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.044	< 0.098
MW-22	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**49**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/8/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**150**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**130**	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/23/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**86**	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/16/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	**13**	< 0.20	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.044	< 0.098
MW-202DR	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	**0.060**	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/16/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.044	< 0.097
MW-203	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	**0.075**	< 0.10	**0.12**	**0.068**	< 0.050	**0.13**
	7/15/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
	1/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.10
MW-205	1/15/2015	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/16/2014	N	< 50	**1100**	< 5.0	**170**	< 5.0	**77**	< 5.0	**220**	**12**	**7**	**4.3**	**2.5**	**1.8**	**1.7**	**0.76**	**0.59**	**2**	**0.19**
	1/9/2014	N	< 50	**3,100**	< 5.0	**360**	< 5.0	**99**	< 5.0	**250**	**14**	**6.7**	**3.7**	**1.3**	**0.73**	**0.59**	**0.27**	**0.2**	**0.9**	<0.10
	7/11/2013	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2013	N	< 100	**4,300 D**	< 5.0	**400 D**	< 5.0	**940 D**	< 5.0	**500 D**	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22
	7/26/2012	N	< 100	**3,300 D**	< 5.0	**490 D**	< 5.0	**1,100 D**	< 5.0	**640 D**	**11**	**6.9**	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9
	1/25/2012	N	**5.7 J**	**6,600**	< 0.60	**660**	< 1.0	**1,500**	< 0.13	**640**	**11**	**14**	**4.3**	**1.5 J**	< 1.1	< 1.1	< 1.1	< 1.1	**1.4 J**	< 1.1
MW-206	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/16/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 100	**6.9**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/26/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.048	< 0.11
MW-207	1/12/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/29/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.051**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/6/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/8/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
	1/16/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.10
MW-303	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.087**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.18**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.14**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.13**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	**0.26 J**	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.048	< 0.11
	1/17/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.095	< 0.095	**0.12 J**	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.043	< 0.095

Table 2-2
Groundwater Analytical Results for Galliard Formation

Category			VOCs								SVOCs									
Constituent			Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Toluene	Trichloroethylene	Xylenes, total	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene
Type 1 RRS			4,000	5	4,000	700	5	1,000	5	10,000	2,000	10	10	0.1	0.2	0.2	10	10	0.2	0.3
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MW-304	1/15/2015	N	< 50	**27**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**9.6**	**31**	< 1.0	**0.54**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	**91**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**34**	< 1.0	**0.46**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	**27**	< 5.0	**12**	< 5.0	< 5.0	< 5.0	**26**	**32**	< 1.0	**0.93**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	**76**	< 5.0	**28**	< 5.0	< 5.0	< 5.0	**29**	**53**	< 1.0	**1.1**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	**10**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**31**	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
	7/25/2012	N	< 100	**43**	< 5.0	**36**	< 5.0	< 5.0	< 5.0	**43**	**58**	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3
	1/18/2012	N	< 5.0	**140**	< 0.60	**0.97 J**	< 1.0	< 0.33	< 0.13	**14**	**71**	< 0.11	**0.5**	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.048	< 0.11
MW-306D	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
	1/17/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.047	< 0.10
MW-307D	1/12/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/29/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.057**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.044	< 0.098
	1/16/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.050	< 0.11
MW-401D	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**27**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/13/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**41**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**41**	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 200	< 10	< 10	< 10	< 10	< 10	**33**	< 10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/24/2012	N	< 200	< 10	< 10	< 10	< 10	< 10	**28**	< 10	< 0.20	**0.27**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	1/18/2012	N	< 5.0	< 0.25	< 0.60	< 1.1	< 10	< 3.3	**38 J**	< 2.0	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.043	< 0.097
MW-402D	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/17/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	**0.16 J**	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.10
MW-404DR	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	**0.082**	**0.074**	**0.065**	< 0.10	< 0.10	**0.065**	**0.067**	< 0.10
	1/13/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
	7/26/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/19/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.049	< 0.11
MW-408D	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/16/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**41**	< 1.0	**0.9**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**32**	< 1.0	**0.83**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**17**	< 1.0	**0.39**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**32**	**0.40**	**0.87**	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
	7/25/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**30**	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
	1/25/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11 *	< 0.11	< 0.11	< 0.050	< 0.11
MW-502D	1/15/2015	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/2014	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2014	N	< 50	**430**	< 5.0	**1,500**	< 5.0	**67**	< 5.0	**1,000**	**130**	**13**	**7.4**	**1.5**	**1.4**	**1.0**	**0.61**	**0.40**	**1.1**	**0.13**
	1/14/2014	DUP-06	< 50	**450**	< 5.0	**1,600**	< 5.0	**69**	< 5.0	**1,100**	**130**	**13**	**7.4**	**1.6**	**1.4**	**1.0**	**0.61**	**0.47**	**1.2**	**0.14**
	7/11/2013	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2013	N	< 2,000	**430**	< 100	**2,600**	< 100	**170**	< 100	**2,400**	**3,800**	**1,900**	**2,000**	**1,300**	**1,100**	**1,100**	**330**	< 21	**960**	**130**
	1/10/2013	DUP-05	< 2,000	**400**	< 100	**2,700**	< 100	**210**	< 100	**2,600**	**6,200**	**3,100**	**3,200**	**2,100**	**1,900**	**1,800**	**530**	< 22	**1,600**	< 22
	7/25/2012	N	< 2,000	**410**	< 100	**1,100**	< 100	< 100	< 100	**780**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	7/25/2012	DUP-06	< 100	**370 D**	< 5.0	**850 D**	< 5.0	**54**	< 5.0	**520**	**190**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/25/2012	N	< 100	**440**	< 12	**1,600**	< 20	**72 J**	< 2.6	**1,200**	**200**	**67**	**43**	**35**	**35**	**27***	**14**	**13**	**28**	**4.5**
	1/25/2012	DUP-06	< 250	**510**	< 30	**1,600**	< 50	**120 J**	< 6.5	**1,200**	**180**	**39**	**11**	**2.9**	**3.0**	**2.4***	**1.5 J**	**1.1 J**	**2.6**	< 1.1
MW-505D	1/15/2015	N	< 50	< 5.0	< 5.0	**13**	< 5.0	< 5.0	< 5.0	**6.8**	< 0.50	< 1.0	< 0.050	< 0.050	**0.051**	< 0.10	**0.11**	< 0.050	< 0.050	**0.11**
	7/15/2014	N	< 50	< 5.0	< 5.0	**34**	< 5.0	< 5.0	< 5.0	**14**	**47**	< 1.0	**0.8**	**0.29**	**0.16**	**0.36**	< 0.10	**0.3**	**0.38**	**0.31**
	1/8/2014	N	< 50	< 5.0	< 5.0	**67**	< 5.0	< 5.0	< 5.0	**59**	**55**	**1.1**	**1.3**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	< 5.0	< 5.0	**64**	< 5.0	< 5.0	< 5.0	**43**	**56**	**2.5**	**1.0**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	**79**	< 5.0	**11**	< 5.0	**61**	**6.6**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
	7/26/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**36**	**7.7**	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
	1/24/2012	N	< 5.0	**2.2 J**	< 0.60	**0.35 J**	< 1.0	< 0.33	< 0.13	**0.96 J**	**87 D**	**7.6**	**0.54**	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.048	< 0.11
MW-600	1/14/2015	N	< 25,000	**25,000**	< 2500	< 2500	< 2500	**8,500**	< 2500	**2,600**	**14**	**120**	**2.4**	**0.38**	**0.30**	**0.28**	**0.16**	**0.085**	**0.30**	< 0.10
	7/16/2014	N	< 25,000	**25,000**	< 2500	< 2500	< 2500	**17,000**	< 2500	**4,600**	**9.2**	**210**	**8.9**	**2.8**	**2.1**	**1.8**	**0.79**	**0.68**	**2.1**	**0.2**
	1/9/2014	N	< 2,500	**20,000**	< 250	**2,400**	< 250	**12,000**	< 250	**3,700**	**21**	**190**	**5.6**	**0.97**	**0.72**	**0.47**	**0.26**	**0.18**	**0.66**	< 0.10
	7/11/2013	N	< 2,500	**7,000**	< 250	**990**	< 250	**5,300**	< 250	**2,100**	**6.2**	**53**	**1.5**	< 0.50	< 0.50	< 1.0	< 0.10	< 0.50	< 0.50	< 1.0
	7/11/2013	DUP-04	< 2,500	**5,900**	< 250	**760**	< 250	**4,300**	< 250	**1,600**	**6.3**	< 100	**1.7**	**0.31**	**0.23**	**0.19**	< 0.10	**0.096**	**0.26**	< 0.10
	1/10/2013	N	**< 20,000**	**26,000**	< 1,000	**1,300**	< 1,000	**12,000**	< 1,000	**3,000**	< 22	**93**	< 22	< 22	< 22	< 22	< 22	< 22	< 22	< 22
	7/26/2012	N	< 5,000	**48,000 D**	< 250	**1,300**	< 250	**24,000 D**	< 250	**5,100 D**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/25/2012	N	**790 J**	**38,000 D**	< 30	**1,800**	< 50	**15,000 D**	< 6.5	**5,400**	**12 D**	**210 D**	**9.0 D**	**3.6 D**	**3.6 D**	**3.0 D***	**1.7 JD**	**1.1 JD**	**3.0 D**	< 1.0 D

Table 2-2
Groundwater Analytical Results for Galliard Formation

Category			VOCs								SVOCs									
Constituent			Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Toluene	Trichloroethylene	Xylenes, total	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene
Type 1 RRS			4,000	5	4,000	700	5	1,000	5	10,000	2,000	10	10	0.1	0.2	0.2	10	10	0.2	0.3
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MW-601	1/14/2015	N	< 5,000	**6,900**	< 500	**960**	< 500	**2,100**	< 500	**1,900**	**12**	**45**	**4.4**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/16/2014	N	< 5,000	**31,000**	< 500	**1,600**	< 500	**16,000**	< 500	**4200**	**4.6**	**70**	**4.7**	**0.24**	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2014	N	< 5,000	**18,000**	< 500	**1,300**	< 500	**6,100**	< 500	**2,500**	**14**	**50**	**7.7**	**0.40**	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 2,500	**18,000**	< 250	**1,000**	< 250	**8,700**	< 250	**3,400**	**18**	**64**	**6.7**	< 0.50	< 0.50	< 1.0	< 0.10	< 0.50	< 0.50	< 1.0
	1/10/2013	N	< 2,500	**28,000**	< 130	**950**	< 130	**13,000**	< 130	**3,700**	**19**	**81**	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19
	7/25/2012	N	< 25,000	**27,000**	< 1,300	< 1,300	< 1,300	**11,000**	< 1,300	**3,800**	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210
	1/19/2012	N	< 1,300	**21,000**	< 150	**950 J**	< 250	**8,800**	< 33	**3,300**	**18**	**75**	**7.1 J**	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 2.2	< 4.8
MW-602	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.6**	< 1.0	**0.10**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.9**	< 1.0	**0.17**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3.5**	< 1.0	**0.16**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**4.3**	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
	7/23/2012	N	< 5.0	**110**	< 0.60	**3.0 J**	< 1.0	**0.34 J**	< 0.13	**1.5 J**	**11**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.23	< 0.50
	1/17/2012	N	< 5.0	**2.1 J**	< 0.60	**0.11 J**	< 1.0	< 0.33	< 0.13	**0.45 J**	**6.7**	**0.18 J**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.10
MW-603	1/14/2015	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/2014	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2014	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/11/2013	N	< 50	< 5.0	< 5.0	**74**	< 5.0	< 5.0	< 5.0	**39**	**40**	< 1.0	**1.6**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	**82**	< 5.0	< 5.0	< 5.0	**40**	**100**	**31**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	7/26/2012	N	< 100	< 5.0	< 5.0	**88**	< 5.0	< 5.0	< 5.0	**51**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/17/2012	N	< 5.0	**2.0 J**	< 0.60	**120**	< 1.0	**3.0 J**	< 0.13	**69**	**85**	**4.1**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.46	< 1.0

Notes:
N = Normal sample
DUP = Duplicate sample
DNAPL - Well not sampled due to presence of Dense Non-Aqueous Phase Liquid in well
BOLD=Analyte was detected above laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond specified holding time

Table 2-2
Groundwater Analytical Results for Galliard Formation

Category			SVOCs						Inorganics													
Constituent			Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Thallium	Vanadium	Zinc
Type 1 RRS			1,000	1,000	0.4	20	10	1,000	0.006	0.01	2	0.004	0.005	0.1	1.3	0.2	0.015	0.002	0.1	0.05	0.002	0.2	2
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-12	1/14/2015	N	**0.26**	**18**	< 0.050	**3,700**	**11**	**0.23**	< 0.0200	< 0.0500	**0.231**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/14/2015	DUP-03	**0.35**	**23**	< 0.050	**4,900**	**14**	**0.32**	< 0.0200	< 0.0500	**0.236**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.012**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	N	**0.56**	**29**	< 0.050	**5,700**	**21**	**0.44**	< 0.0200	< 0.0500	**0.182**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	DUP-02	**0.58**	**33**	< 0.050	**6,200**	**23**	**0.47**	< 0.0200	< 0.0500	**0.178**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	**0.28**	**19**	< 0.050	**3,800**	**14**	**0.27**	< 0.0200	< 0.0500	**0.212**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	DUP-02	**0.32**	**19**	< 0.050	**3,300**	**14**	**0.3**	< 0.0200	< 0.0500	**0.213**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	**0.16**	**8.1**	< 0.050	< 0.50	**3.8**	**0.13**	< 0.0200	< 0.0500	**0.225**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	DUP-02	**0.16**	**7.9**	< 0.050	< 0.50	**3.3**	**0.15**	< 0.0200	< 0.0500	**0.221**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 22	< 22	< 22	**480**	< 22	< 22	< 0.020	< 0.020	**0.32**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/9/2013	DUP-02	< 22	< 22	< 22	**450**	< 22	< 22	< 0.020	< 0.020	**0.32**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 20	< 20	< 20	**880**	< 20	< 20	< 0.020	< 0.020	**0.44**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	DUP-05	< 9.5	< 9.5	< 9.5	**520**	< 9.5	< 9.5	< 0.020	< 0.020	**0.44**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/18/2012	N	< 0.097	**7.3**	< 0.097	**630**	**5.1**	**0.11 J**	< 0.0053	< 0.0046	**0.39**	**0.00096 J**	< 0.0020	**0.0012 J**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
	1/18/2012	DUP-03	< 1.0	**19**	< 1.0	**3,300**	**12**	< 1.0	< 0.0053	< 0.0046	**0.44**	**0.0014 J**	< 0.0020	**0.0032 J**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-19	1/14/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0824**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.020**	< 0.0100	< 0.00020	**0.0275**	< 0.0200	< 0.0200	< 0.0100	**0.0747**
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	**0.082**	< 0.0200	< 0.0500	**0.0907**	< 0.0100	< 0.0050	**0.0127**	< 0.0100	**0.02**	< 0.0100	< 0.00020	**0.0432**	< 0.0200	< 0.0200	< 0.0100	**0.0856**
	1/9/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0935**	< 0.0100	< 0.0050	**0.0151**	< 0.0100	< 0.010	< 0.0100	< 0.00020	**0.0579**	< 0.0200	< 0.0200	< 0.0100	**0.0985**
	7/10/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.123**	< 0.0100	**0.0091**	< 0.0100	< 0.0100	**0.012**	< 0.0100	< 0.00020	**0.0568**	< 0.0200	< 0.0200	< 0.0100	**0.142**
	1/9/2013	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.12**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.023**	< 0.010	< 0.00020	**0.073**	< 0.020	< 0.0010	< 0.010	**0.12**
	7/25/2012	N	< 0.19	< 0.19	< 0.19	**0.49**	< 0.19	< 0.19	< 0.020	< 0.020	**0.098**	< 0.0040	< 0.0050	**0.012**	< 0.020	**0.058**	< 0.010	< 0.00020	**0.073**	< 0.020	< 0.0010	< 0.010	**0.14**
	1/19/2012	N	< 0.098	< 0.098	< 0.098	**0.20**	< 0.098	**0.23**	< 0.0053	< 0.0046	**0.036**	< 0.00020	< 0.0020	**0.0088 J**	**0.0024 J**	**0.0096 J**	< 0.0040	< 0.000091	**0.023 J**	< 0.0064	< 0.00025	< 0.0024	**0.030**
MW-21	1/12/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0854**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0847**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/10/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.084**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	< 0.10	< 0.10	< 0.050	**1.4**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0759**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.066**	< 0.0040	< 0.0050	**0.010**	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.19	< 0.19	< 0.19	**0.52**	< 0.19	< 0.19	< 0.020	< 0.020	**0.063**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/18/2012	N	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.0053	< 0.0046	**0.035**	< 0.00020	< 0.0020	**0.022**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-22	1/13/2015	N	< 0.10	< 0.10	< 0.050	**2.8**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0300**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0847**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.084**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/8/2013	N	< 0.10	< 0.10	< 0.050	**1.4**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0759**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.066**	< 0.0040	< 0.0050	**0.010**	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/23/2012	N	< 0.19	< 0.19	< 0.19	**0.52**	< 0.19	< 0.19	< 0.020	< 0.020	**0.063**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/16/2012	N	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.0053	< 0.0046	**0.035**	< 0.00020	< 0.0020	**0.022**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-202DR	1/13/2015	N	< 0.10	< 0.10	< 0.050	**2.7**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0536**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0549**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2014	N	< 0.10	< 0.10	**0.065**	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0541**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0519**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.05**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.055**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/16/2012	N	< 0.097	< 0.097	< 0.097	**1.2**	< 0.097	< 0.097	< 0.0053	< 0.0046	**0.062**	< 0.00020	< 0.0020	**0.0049 J**	**0.0058 J**	< 0.0050	< 0.0040	< 0.000091	**0.013 J**	< 0.0064	< 0.00025	**0.0027 J**	**0.038**
MW-203	1/14/2015	N	< 0.10	< 0.10	**0.13**	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0758**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	**0.0607**	**0.0312**
	7/15/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0499**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	**0.0135**	< 0.0200
	1/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0602**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	**0.0374**	< 0.0200
	7/10/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0757**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	**0.0155**	< 0.0200
	1/10/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.13**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	**0.016**	< 0.020
	7/24/2012	N	< 0.22	< 0.22	< 0.22	**2.5**	< 0.22	< 0.22	< 0.020	< 0.020	**0.068**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/23/2012	N	< 0.10	< 0.10	< 0.10	**0.58**	< 0.10	< 0.10	< 0.0053	**0.0046 J**	**0.047**	< 0.00020	< 0.0020	**0.0040 J**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	**0.0070 J**	< 0.0064	< 0.00025	**0.0075 J**	**0.016 J**
MW-205	1/15/2015	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/16/2014	N	**5.6**	**31**	**0.65**	**390**	**38**	**7.2**	< 0.0200	< 0.0500	< 0.0200	< 0.0100	< 0.0050	**0.0133**	< 0.0100	**0.012**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2014	N	**4.3**	**38**	**0.24**	**1,300**	**41**	**5.0**	< 0.0200	< 0.0500	< 0.0200	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2013	N	< 22	**33**	< 22	**1,400**	**30**	< 22	< 0.020	< 0.020	< 0.010	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/26/2012	N	< 3.9	**47**	< 3.9	**2,300**	**40**	**4.6**	< 0.020	< 0.020	< 0.010	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.012**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/25/2012	N	**6.2**	**68**	< 1.1	**600 D**	**56**	**7.4**	< 0.0053	< 0.0046	**0.0078 J**	< 0.00020	< 0.0020	**0.0014 J**	< 0.0019	**0.012**	< 0.0040	< 0.000091	**0.0030 J**	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-206	1/14/2015	N	< 0.10	< 0.10	< 0.050	**1.8**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.201**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/16/2014	N	< 0.10	< 0.10	< 0.050	**0.94**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.269**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	**0.0129**	< 0.0200
	1/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.270**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.315**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/10/2013	N	< 0.19	< 0.19	< 0.19	**0.97**	< 0.19	< 0.19	< 0.020	< 0.020	**0.25**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/26/2012	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.28**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/23/2012	N	< 0.11	< 0.11	< 0.11	**0.27**	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.14**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-207	1/12/2015	N	< 0.10	< 0.10	**0.058**	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.271**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/29/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.323**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	**0.0687**	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.262**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/6/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.353**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/8/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.290**	< 0.0100	**0.0062**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2013	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.35**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.020	< 0.020	**0.34**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.012**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/16/2012	N	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.0053	**0.013 J**	**0.34**	< 0.00020	< 0.0020	**0.0016 J**	< 0.0019	**0.0060 J**	< 0.0040	< 0.000091	**0.0076 J**	< 0.0064	< 0.00025	**0.0051 J**	< 0.0087
MW-303	1/13/2015	N	**0.11**	< 0.10	< 0.050	< 0.50	< 0.050	**0.11**	< 0.0200	< 0.0500	**0.0888**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	**0.14**	< 0.10	< 0.050	< 0.50	< 0.050	**0.11**	< 0.0200	< 0.0500	**0.0945**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	**0.10**	< 0.10	< 0.050	< 0.50	< 0.050	**0.072**	< 0.0200	< 0.0500	**0.0943**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.113**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2013	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.14**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/23/2012	N	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.14**	**0.00041 J**	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	**0.0073 J**	< 0.0064	< 0.00025	< 0.0024	**0.0088 J**
	1/17/2012	N	< 0.095	< 0.095	< 0.095	**0.80**	< 0.095	< 0.095	< 0.0053	< 0.0046	**0.14**	**0.00025 J**	**0.0051**	< 0.0012	**0.0025 J**	< 0.0050	< 0.0040	< 0.000091	**0.0065 J**	< 0.0064	< 0.00025	< 0.0024	**0.061**

Table 2-2
Groundwater Analytical Results for Galliard Formation

Category			SVOCs						Inorganics													
Constituent			Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Thallium	Vanadium	Zinc
Type 1 RRS			1,000	1,000	0.4	20	10	1,000	0.006	0.01	2	0.004	0.005	0.1	1.3	0.2	0.015	0.002	0.1	0.05	0.002	0.2	2
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-304	1/15/2015	N	**0.40**	**4.4**	**0.064**	**27**	**3.2**	**0.42**	< 0.0200	< 0.0500	**0.324**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	**0.43**	**3.5**	< 0.050	**12**	**2.1**	**0.45**	< 0.0200	< 0.0500	**0.367**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	**0.54**	**5.8**	< 0.050	**65**	**5.0**	**0.52**	< 0.0200	< 0.0500	**0.395**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	**0.62**	**6.6**	< 0.050	**280**	**5.7**	**0.54**	< 0.0200	< 0.0500	**0.407**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 20	< 20	< 20	**300**	< 20	< 20	< 0.020	< 0.020	**0.37**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 4.3	**8.4**	< 4.3	**430**	**7.2**	< 4.3	< 0.020	< 0.020	**0.38**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/18/2012	N	**0.39**	**5.0**	< 0.11	**98**	**3.0**	**0.40**	< 0.0053	< 0.0046	**0.38**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-306D	1/13/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.377**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.435**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	**0.075**	< 0.0200	< 0.0500	**0.424**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	**0.060**	< 0.0200	< 0.0500	**0.785**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.69**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.23	< 0.23	< 0.23	**4.1**	< 0.23	< 0.23	< 0.020	< 0.020	**0.71**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/17/2012	N	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.0053	< 0.0046	**0.61**	< 0.00020	< 0.0020	**0.0016 J**	**0.0023 J**	< 0.0050	< 0.0040	< 0.000091	**0.0029 J**	< 0.0064	< 0.00025	< 0.0024	**0.011 J**
MW-307D	1/12/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0705**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/29/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	**0.079**	< 0.0200	< 0.0500	**0.0712**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.258**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	**0.065**	< 0.0200	< 0.0500	**0.0751**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0638**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.29**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/23/2012	N	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.0053	< 0.0046	**0.061**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	**0.0049 J**	< 0.0064	< 0.00025	< 0.0024	< 0.0087
	1/16/2012	N	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.068**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	**0.0059 J**	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-401D	1/14/2015	N	< 0.10	< 0.10	< 0.050	**5.1**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0847**	< 0.0100	**0.0358**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0387**
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0686**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/13/2014	N	< 0.10	< 0.10	< 0.050	**0.69**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0626**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	< 0.10	< 0.10	< 0.050	**0.95**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0546**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.055**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.20	< 0.20	< 0.20	**0.60**	< 0.20	< 0.20	< 0.020	< 0.020	**0.048**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/18/2012	N	< 0.097	< 0.097	< 0.097	**2.9**	< 0.097	< 0.097	< 0.0053	< 0.0046	**0.054**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0025 J**	< 0.0087
MW-402D	1/13/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0768**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0771**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0874**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	**0.00042**	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0950**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.020	< 0.020	**0.10**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.083**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/17/2012	N	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.0053	< 0.0046	**0.12**	< 0.00020	< 0.0020	**0.0012 J**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-404DR	1/14/2015	N	< 0.10	< 0.10	< 0.050	**3.3**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0678**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	< 0.10	< 0.10	**0.064**	< 0.50	**0.083**	**0.084**	< 0.0200	< 0.0500	**0.141**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/13/2014	N	< 0.10	< 0.10	< 0.050	**0.55**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.140**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	< 0.10	< 0.10	< 0.050	**1.1**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.174**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.012**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0233**
	1/9/2013	N	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.020	< 0.020	**0.15**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/26/2012	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.19**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.020**
	1/19/2012	N	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.16**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0029 J**	< 0.0087
MW-408D	1/13/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	**0.429**	**0.448**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/16/2014	N	**0.23**	**1.9**	< 0.050	**31**	**3.7**	**0.15**	< 0.0200	< 0.0500	**0.496**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.132**
	1/8/2014	N	**0.23**	**2.0**	< 0.050	**0.57**	**5.3**	**0.16**	< 0.0200	< 0.0500	**0.575**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	**0.10**	**1.3**	< 0.050	< 0.50	**2.5**	**0.065**	< 0.0200	< 0.0500	**0.569**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	**0.23**	**2.7**	< 0.22	**0.27**	**5.8**	< 0.22	< 0.020	< 0.020	**0.56**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.038**
	7/25/2012	N	< 1.9	**2.2**	< 1.9	< 1.9	**5.1**	< 1.9	< 0.020	< 0.020	**0.58**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/25/2012	N	< 0.11	< 0.11	< 0.11	**0.57**	< 0.11	< 0.11	< 0.0053	**0.045**	**0.26**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	**0.0063 J**	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-502D	1/15/2015	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/2014	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2014	N	**4.1**	**38**	**0.49**	**4,900**	**38**	**6.3**	< 0.0200	< 0.0500	**0.671**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.012**	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/14/2014	DUP-06	**4.0**	**38**	**0.51**	**4,300**	**37**	**6.3**	< 0.0200	< 0.0500	**0.665**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.018**	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2013	N	**2,400**	**3,000**	**330**	**29,000**	**7,700**	**3,700**	< 0.020	< 0.020	**0.59**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.013**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/10/2013	DUP-05	**3,800**	**5,100**	**480**	**50,000**	**13,000**	**6,100**	< 0.020	< 0.020	**0.58**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.012**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 190	< 190	< 190	**4,100**	< 190	< 190	< 0.020	< 0.020	**0.68**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.011**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	DUP-06	< 190	< 190	< 190	**4,700**	< 190	< 190	< 0.020	< 0.020	**0.67**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/25/2012	N	**53**	**92**	**12**	**6,300 D**	**170**	**68**	< 0.0053	< 0.0046	**0.66**	< 0.00020	< 0.0020	**0.0019 J**	< 0.0019	**0.0080 J**	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
	1/25/2012	DUP-06	**7.9**	**63**	**1.3 J**	**7,700 D**	**65**	**9.7**	< 0.0053	< 0.0046	**0.71**	< 0.00020	< 0.0020	**0.0020 J**	< 0.0019	**0.010**	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-505D	1/15/2015	N	< 0.10	< 0.10	**0.10**	**4.2**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.342**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0202**
	7/15/2014	N	**0.8**	**6.1**	**0.054**	**590**	**4.1**	**0.99**	< 0.0200	< 0.0500	**0.468**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	**1.1**	**9.5**	< 0.050	**840**	**8.1**	**1.2**	< 0.0200	< 0.0500	**0.373**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	**1.3**	**12**	< 0.050	**870**	**7.1**	**1.1**	< 0.0200	< 0.0500	**0.395**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 2.0	< 2.0	< 2.0	**83**	< 2.0	< 2.0	< 0.020	< 0.020	**0.34**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/26/2012	N	< 1.9	**5.3**	< 1.9	**49**	< 1.9	< 1.9	< 0.020	< 0.020	**0.32**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/24/2012	N	**0.92**	**13**	< 0.11	**15**	**2.7**	**0.87**	< 0.0053	< 0.0046	**0.23**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0046 J**	**0.022**
MW-600	1/14/2015	N	**1.2**	**20**	**0.11**	**5,400**	**15**	**1.8**	< 0.0200	< 0.0500	**0.157**	< 0.0100	< 0.0050	< 0.0100	**0.0312**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.208**
	7/16/2014	N	**6.9**	**48**	**0.69**	**10,000**	**53**	**8.5**	< 0.0200	< 0.0500	**0.315**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	**0.0102**	**0.058**
	1/9/2014	N	**3.2**	**39**	**0.21**	**7,700**	**36**	**3.8**	< 0.0200	< 0.0500	**0.197**	< 0.0100	< 0.0050	< 0.0100	**0.0351**	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	**0.288**
	7/11/2013	N	**1.0**	**12**	< 0.50	**2,500**	**9.8**	**1.2**	< 0.0200	< 0.0500	**0.0615**	< 0.0100	< 0.0050	< 0.0100	**0.0292**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**1.53**
	7/11/2013	DUP-04	**1.2**	**16**	**0.065**	**2,900**	**9.6**	**1.4**	< 0.0200	< 0.0500	**0.0613**	< 0.0100	< 0.0050	< 0.0100	**0.0298**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**1.59**
	1/10/2013	N	< 22	< 22	< 22	**5,700**	< 22	< 22	< 0.020	< 0.020	**0.097**	< 0.0040	< 0.0050	< 0.010	**0.021**	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.099**
	7/26/2012	N	< 190	< 190	< 190	**8,200**	< 190	< 190	< 0.020	< 0.020	**0.25**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	**0.015**	**0.15**
	1/25/2012	N	**9.5 D**	**41 D**	**1.4 JD**	**11,000 D**	**50 D**	**11 D**	< 0.0053	**0.0075 J**	**0.27**	**0.00060 J**	< 0.0020	< 0.0012	**0.0024 J**	< 0.0050	< 0.0040	< 0.000091	**0.0037 J**	< 0.0064	< 0.00025	**0.016**	**0.017 J**

Table 2-2
Groundwater Analytical Results for Galliard Formation

Category			SVOCs						Inorganics													
Constituent			Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Thallium	Vanadium	Zinc
Type 1 RRS			1,000	1,000	0.4	20	10	1,000	0.006	0.01	2	0.004	0.005	0.1	1.3	0.2	0.015	0.002	0.1	0.05	0.002	0.2	2
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-601	1/14/2015	N	**0.49**	**36**	< 0.050	**6,500**	**17**	**0.47**	< 0.0200	< 0.0500	**0.275**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.022**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0379**
	7/16/2014	N	**0.4**	**0.19**	< 0.050	**8,700**	**16**	**0.49**	< 0.0200	< 0.0500	**0.169**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.048**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0564**
	1/9/2014	N	**0.67**	**42.0**	< 0.050	**8,400**	**25**	**1.0**	< 0.0200	< 0.0500	**0.249**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.025**	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	**0.121**
	7/11/2013	N	< 1.0	**53.0**	< 0.50	**9,900**	**25**	**0.76**	< 0.0200	< 0.0500	**0.270**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.026**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0291**
	1/10/2013	N	< 19	**64.0**	< 19	**11,000**	**35**	< 19	< 0.020	< 0.020	**0.28**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.035**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.077**
	7/25/2012	N	< 210	< 210	< 210	**11,000**	< 210	< 210	< 0.020	< 0.020	**0.29**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.041**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/19/2012	N	< 4.8	**63**	< 4.8	**770**	**38**	< 4.8	< 0.0053	**0.0096 J**	**0.30**	< 0.00020	< 0.0020	**0.0019 J**	< 0.0019	**0.048**	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0024 J**	< 0.0087
MW-602	1/13/2015	N	< 0.10	**0.22**	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.491**	< 0.0100	< 0.0050	< 0.0100	**0.0221**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.165**
	7/15/2014	N	< 0.10	**0.31**	< 0.050	< 0.50	< 0.050	**0.054**	< 0.0200	< 0.0500	**0.553**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0299**
	1/7/2014	N	< 0.10	**0.69**	< 0.050	< 0.50	< 0.050	**0.080**	< 0.0200	< 0.0500	**0.583**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.040	< 0.0200	< 0.0200	< 0.0100	**0.0432**
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.137**	< 0.0100	< 0.0050	< 0.0100	**0.0117**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.583**
	1/7/2013	N	< 0.22	**0.55**	< 0.22	< 0.22	< 0.22	< 0.22	< 0.020	< 0.020	**0.38**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.40**
	7/23/2012	N	< 0.50	**1.6**	< 0.50	**65**	< 0.50	< 0.50	< 0.0053	< 0.0046	**0.40**	< 0.00020	< 0.0020	< 0.0012	**0.0049 J**	< 0.0050	< 0.0040	< 0.000091	**0.0024 J**	< 0.0064	< 0.00025	**0.0044 J**	**0.17**
	1/17/2012	N	**0.14 J**	**0.47**	< 0.10	**0.34**	< 0.10	**0.22**	< 0.0053	< 0.0046	**0.57**	< 0.00020	< 0.0020	**0.0031 J**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-603	1/14/2015	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/2014	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2014	DNAPL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/11/2013	N	**0.78**	**9.3**	< 0.050	**490**	**8.4**	**0.71**	< 0.0200	< 0.0500	**0.808**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 10	**29**	< 10	**1,000**	**22**	< 10	< 0.020	< 0.020	**0.67**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.021**
	7/26/2012	N	< 190	< 190	< 190	**1,100**	< 190	< 190	< 0.020	< 0.020	**0.74**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/17/2012	N	< 1.0	**20**	< 1.0	**1,400 D**	**13**	< 1.0	< 0.0053	< 0.0046	**0.84**	< 0.00020	< 0.0020	**0.0016 J**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0024 J**	< 0.0087

Notes:
N = Normal sample
DUP = Duplicate sample
DNAPL - Well not sampled due to presence of Dense Non-Aqueous Phase Liquid in well
BOLD=Analyte was detected above laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond specified holding time

Prepared By: KPH 03/23/15
Checked By: SAG 03/26/15

Table 2-3
Groundwater Analytical Results for Bedrock Wells

Category			VOCs								SVOCs									
Constituent			Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Toluene	Trichloroethylene	Xylenes, total	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene
Type 1 RRS			4,000	5	4,000	700	5	1,000	5	10,000	2,000	10	10	0.1	0.2	0.2	10	10	0.2	0.3
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MW-213	1/13/2015	N	< 50	**8,900**	< 5.0	**1,500**	< 5.0	**460**	< 5.0	**1,300**	**180**	**180**	**7.9**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	**950**	< 5.0	**110**	< 5.0	**59**	< 5.0	**95**	**9.1**	< 1.0	**0.43**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 2,500	**6,000**	< 250	**1,300**	< 250	**800**	< 250	**1,300**	**52**	< 1,000	**3.1**	**0.058**	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	**7100**	< 5.0	**1,300**	< 5.0	**720**	< 5.0	**1,800**	**63**	**82**	**2.7**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 5,000	**8,300**	< 250	**1,600**	< 250	**640**	< 250	**1,400**	< 220	< 220	< 220	< 220	< 220	< 220	< 220	< 220	< 220	< 220
	7/25/2012	N	< 5,000	**6,500**	< 250	**1,100**	< 250	**670**	< 250	**1,100**	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210
	1/18/2012	N	< 250	**5,100**	< 30	**1,000**	< 50	**710**	< 6.5	**950**	**67**	**170**	**4.1**	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.043	< 0.096
MW-306BR	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**5.3**	< 1.0	**0.062**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	**300**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**11**	< 1.0	**0.14**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	**500**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**14**	< 1.0	**0.16**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3.2**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/25/2012	N	< 100	**68**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**5.2**	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8
	1/17/2012	N	< 50	**720**	< 6.0	**4.6 J**	< 10	< 3.3	< 1.3	**5.6 J**	**5.1**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.056	< 0.10
MW-307BR*	1/16/2015	Vault	< 5000	**12,000**	< 500	**2,000**	< 500	< 500	< 500	**720**	**220**	< 1.0	**7.2**	**0.20**	< 0.050	< 0.10	< 0.10	< 0.050	**0.13**	< 0.10
	1/15/2015	DUP-04	< 5000	**12,000**	< 500	**2,100**	< 500	< 500	< 500	**770**	**220**	< 1.0	**6.6**	**0.15**	< 0.050	< 0.10	< 0.10	< 0.050	**0.11**	< 0.10
	7/16/2014	Vault	< 5000	**15,000**	< 500	**2,400**	< 500	< 500	< 500	**1,000**	**240**	**3**	**7.7**	**0.19**	< 0.050	< 0.10	< 0.10	< 0.050	**0.15**	< 0.10
	7/16/2014	DUP-06	< 2500	**15,000**	< 250	**2,600**	< 250	< 250	< 250	**1,200**	**260**	**3**	**7.7**	**0.18**	< 0.050	< 0.10	< 0.10	< 0.050	**0.13**	< 0.10
	1/10/2014	Vault	< 5,000	**13,000**	<500	**2,400**	< 500	<500	< 500	**1,200**	**270**	**2.6**	**8.1**	**0.18**	< 0.050	< 0.10	< 0.10	< 0.050	**0.13**	< 0.10
	1/10/2014	DUP-04	< 5,000	**13,000**	< 500	**2,300**	< 500	< 500	< 500	**1,200**	**250**	**2.6**	**7.7**	**0.18**	< 0.050	< 0.10	< 0.10	< 0.050	**0.12**	< 0.10
	8/13/2013	Vault	< 50	**15,000**	< 5.0	**2,300**	< 5.0	**5.8**	< 5.0	**1,000**	**180**	**1.2**	**6.6**	**0.15**	< 0.050	< 0.10	< 0.10	< 0.050	**0.11**	< 0.10
	8/13/2013	DUP-01	< 50	**15,000**	< 5.0	**2,400**	< 5.0	**5.6**	< 5.0	**1,000**	**160**	**1.6**	**5.2**	**0.11**	< 0.050	< 0.10	< 0.10	< 0.050	**0.088**	< 0.10
	1/9/2013	Vault	< 10,000	**11,000**	< 500	**1,300**	< 500	<500	< 500	**540**	**200**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/9/2013	DUP-03	< 10,000	**13,000**	< 500	**1,500**	< 500	< 500	< 500	**600**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	7/24/2012	N	< 20,000	**12,000**	< 1,000	**2,000**	< 1,000	< 1,000	< 1,000	**1,100**	**260**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	7/24/2012	DUP-01	< 20,000	**12,000**	< 1,000	**2,100**	< 1,000	< 1,000	< 1,000	**1,200**	**190**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/23/2012	N	< 1000	**12,000**	< 120	**1,900**	< 200	**120 J**	< 26	**1,300**	**250**	< 11	< 11	< 11	< 11	< 11	< 11	< 11	< 4.9	< 11
	1/23/2012	DUP-05	< 1000	**12,000**	< 120	**1,900**	< 200	**110 J**	< 26	**1,300**	**230**	< 11	< 11	< 11	< 11	< 11	< 11	< 11	< 4.7	< 11
MW-308BR*	1/29/2015	Vault	< 2500	**6,600**	< 250	**810**	< 250	**2,100**	< 250	**880**	**46**	**66**	**7.0**	**9.6**	**11**	**10**	**5.9**	**3.3**	**7.8**	**1.1**
	1/29/2015	DUP-05	< 2500	**6,100**	< 250	**720**	< 250	**1,900**	< 250	**740**	**46**	**63**	**7.5**	**9.9**	**11**	**10**	**6.2**	**3.2**	**8.3**	**1.2**
	7/16/2014	Vault	< 2500	**6,400**	< 250	**570**	< 250	**940**	< 250	**590**	**170**	< 100	**36**	**28**	**22**	**22**	**11**	**6.7**	**26**	**2.4**
	7/16/2014	DUP-05	< 2500	**6,400**	< 250	**570**	< 250	**940**	< 250	**590**	**180**	**69**	**24**	**18**	**15**	**14**	**6.4**	**4.4**	**17**	**1.4**
	1/10/2014	Vault	**100**	**4,500**	< 5.0	**630**	< 5.0	**810**	< 5.0	**680**	**140**	**84**	**35**	**21**	**17**	**12**	**6.2**	**4.1**	**20**	**1.4**
	1/10/2014	DUP-05	**86**	**4,500**	< 5.0	**620**	< 5.0	**810**	< 5.0	**660**	**160**	**72**	**21**	**10**	**7.1**	**5.3**	**2.7**	**1.9**	**7.6**	**0.6**
	8/13/2013	Vault	< 50	**5,700**	< 5.0	**650**	< 5.0	**1,100**	< 5.0	**840**	**90**	**82**	**26**	**17**	**14**	**13**	**3.9**	**4.5**	**15**	**1.0**
	1/9/2013	Vault	< 5,000	**5,100**	< 250	**550**	< 250	**530**	< 250	**700**	**240**	**250**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/9/2013	DUP-04	< 5,000	**4,100**	< 250	**490**	< 250	**460**	< 250	**620**	**270**	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
	7/24/2012	N	< 5,000	**5,500**	< 250	**700**	< 250	**760**	< 250	**710**	**190**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	7/24/2012	DUP-02	< 10,000	**5,600**	< 500	**700**	< 500	**750**	< 500	**700**	**190**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/20/2012	N	< 250	**5,100**	< 30	**660**	< 50	**810**	**7.9 J**	**710**	**180**	**79**	**32**	**22**	**19**	**23**	**7.3**	< 1.1	**20**	< 1.1
	1/20/2012	DUP-04	< 250	**5,300**	< 30	**690**	< 50	**830**	< 6.5	**710**	**140**	**63**	**31**	**27**	**19**	**25**	**8.4 J**	< 5.7	**22**	< 5.7
MW-309BR	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/29/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	**0.38 J**	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.048	< 0.11
	1/17/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.049	< 0.11
MW-310BR	1/12/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/17/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.047	< 0.10
MW-313	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/17/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.098	< 0.044	< 0.098
MW-315	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.56**	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.10
	1/13/2015	DUP-02	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.65**	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.5**	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.10
	7/14/2014	DUP-01	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.5**	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.10
	1/9/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.0**	< 1.0	< 0.050	**0.16**	**0.18**	**0.14**	**0.15**	**0.15**	**0.15**	**0.16**	
	1/9/2014	DUP-03	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.96**	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10	
	7/11/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.1**	< 1.0	< 0.050	**0.22**	**0.53**	**0.97**	**0.66**	**0.35**	**0.47**	< 0.10	
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.9	< 1.9	< 1.9	**6.0**	**15**	**25**	**16**	**8.7**	**15**	**3.8**
	1/8/2013	DUP-01	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.9**	**0.56**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/25/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.73**	**0.24**	< 0.21	< 0.21	< 0.21	**0.29**	< 0.21	< 0.21	< 0.21	< 0.21
	7/25/2012	DUP-03	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.77**	< 0.21	< 0.21	< 0.21	< 0.21	**0.25**	< 0.21	< 0.21	< 0.21	< 0.21
	1/18/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	**1.5**	< 0.11	< 0.11	**0.51**	**0.76**	**1.9**	**1.2**	**1.7**	**0.84**	< 0.11
	1/18/2012	DUP-02	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	**1.7**	**0.52**	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.048	< 0.11

Table 2-3
Groundwater Analytical Results for Bedrock Wells

Category			VOCs								SVOCs									
Constituent			Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Toluene	Trichloroethylene	Xylenes, total	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene
Type 1 RRS			4,000	5	4,000	700	5	1,000	5	10,000	2,000	10	10	0.1	0.2	0.2	10	10	0.2	0.3
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MW-318	1/14/2015	N	< 50	**1,400**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13**	**37**	< 10	**0.81**	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 0.50	< 1.0
	7/17/2014	N	< 50	**1,700**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**22**	**31**	< 1.0	**0.88**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/27/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.8**	< 1.0	**0.055**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	**3,300**	< 5.0	**11**	< 5.0	< 5.0	< 5.0	**35**	< 0.50	< 1.0	**0.73**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	DUP-03	< 50	**3,300**	< 5.0	**9.4**	< 5.0	< 5.0	< 5.0	**31**	< 0.50	< 1.0	**0.76**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 500	**670**	< 25	< 25	< 25	< 25	< 25	< 25	**11**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
	7/24/2012	N	< 5,000	**3,700**	< 250	< 250	< 250	< 250	< 250	< 250	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210
	2/6/2012	N	< 50	**1,700**	< 6.0	**8.6 J**	< 10	**4.7 J**	< 1.3	**13 J**	**28**	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 9.9	< 4.5	< 9.9
MW-319	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/7/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	**0.075**	**0.25**	**0.16**	**0.33**	**0.22**	**0.19**	**0.27**
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.043	< 0.096
	1/18/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.048	< 0.11
MW-320	1/12/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/6/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	**0.053**	< 0.10	**0.12**	**0.066**	< 0.050	**0.13**
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	**0.051**	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.043	< 0.095
	1/16/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	**0.12 J**	**0.18 J**	< 0.11	**0.15 J**	**0.38**	**0.23 B**	< 0.11
MW-321	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.1**	< 1.0	**0.13**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	**330**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13**	< 1.0	**0.26**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	DUP-01	< 50	**360**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**12**	< 1.0	**0.26**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	**5.0**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.19**	**0.82**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/25/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.29**	**0.20**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/24/2012	N	< 5.0	**12**	**0.67 J**	**1.6 J**	< 1.0	**0.40 J**	< 0.13	**0.44 J**	**43 D**	**1.7**	**0.66**	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.043	< 0.095
MW-324	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/25/2012	N	< 100	**20**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.35**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/24/2012	N	< 50	**1,200 JH**	< 6.0	**25 J**	< 10	**7.4 J**	< 1.3	**29 J**	**0.24**	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.043	< 0.095
MW-325	1/13/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/6/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/23/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.043	< 0.096
	1/16/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.045	< 0.10
MW-500BR	1/14/2015	N	< 5000	**13,000**	< 500	**1,200**	< 500	< 500	< 500	**610**	**86**	**1.2**	**1.6**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/16/2014	N	< 5000	**9,300**	< 500	**620**	< 500	< 500	< 500	< 500	**48**	< 1.0	**0.69**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 5,000	**10,000**	<500	**1,000**	<500	<500	< 500	**670**	**71**	**2.2**	**1.1**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/9/2013	N	< 50	**9,200**	< 5.0	**420**	< 5.0	**11**	< 5.0	**450**	**30**	**1.7**	**0.082**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 10,000	**9,700**	< 500	**820**	< 500	< 500	< 500	**560**	**42**	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19
	7/26/2012	N	< 5,000	**14,000**	< 250	**1,600**	< 250	< 250	< 250	**1,100**	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210	< 210
	1/18/2012	N	< 250	**11,000**	< 30	**1,000**	< 50	**24 J**	< 6.5	**790**	**110**	**2.3**	**1**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.10
MW-503BR	1/15/2015	N	< 50	**35**	< 5.0	< 5.0	< 5.0	**12**	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/16/2014	N	< 50	**910**	< 5.0	**86**	< 5.0	**270**	< 5.0	**100**	< 0.50	< 1.0	**0.05**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/13/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	**180**	< 5.0	**18**	< 5.0	**77**	< 5.0	**26**	< 0.50	< 1.0	**0.053**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 200	**300**	< 10	**44**	< 10	< 10	< 10	**22**	**2.8**	**0.39**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/26/2012	N	< 100	**770 D**	< 5.0	**36**	< 5.0	**230**	< 5.0	**88**	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
	1/19/2012	N	**13 J**	**20**	< 0.60	**2.2 J**	< 1.0	**8.7**	**0.22 J**	**3.4 J**	**0.22**	**0.20**	< 0.96	**0.098 J**	**0.11 J**	**0.15 J**	**0.097 J**	< 0.096	**0.075 J**	< 0.096
MW-504BR	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/16/2014	N	< 50	**570**	< 5.0	**130**	< 5.0	**220**	< 5.0	**110**	< 0.50	< 1.0	**0.25**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 100	**160**	< 5.0	**22**	< 5.0	**49**	< 5.0	**23**	**0.38**	**0.31**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/26/2012	N	< 100	**51**	< 5.0	**8.0**	< 5.0	**16**	< 5.0	**8.4**	**0.24**	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
	1/19/2012	N	< 5.0	**300**	< 0.60	**41**	< 1.0	**86**	< 0.13	**45**	**1.6 J**	**1.2 J**	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.46	< 0.96
MW-506BR	1/13/2015	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/16/2014	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/8/2014	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/10/2013	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2013	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/26/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**22**	< 5.0	**1.5**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/25/2012	N	< 5.0	**0.29 J**	< 0.60	< 0.11	< 1.0	< 0.33	**25**	**0.24 J**	**5.6**	< 0.097	< 0.097	**0.52**	**0.51**	**0.71***	**0.50**	**0.71**	**0.61**	**0.66**

Table 2-3
Groundwater Analytical Results for Bedrock Wells

Category			VOCs								SVOCs									
Constituent			Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Toluene	Trichloroethylene	Xylenes, total	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene
Type 1 RRS			4,000	5	4,000	700	5	1,000	5	10,000	2,000	10	10	0.1	0.2	0.2	10	10	0.2	0.3
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MW-507BR	1/15/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/13/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/26/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/19/2012	N	< 5.0	< 0.25	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.049	< 0.11
MW-508BR	1/15/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/14/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/10/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	**0.31**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/25/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	1/19/2012	N	< 5.0	**0.34 J**	< 0.60	< 0.11	< 1.0	< 0.33	< 0.13	< 0.20	< 0.10	**0.34**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.10
MW-509BR	1/15/2015	N	< 50	**2,500**	< 5.0	**260**	< 5.0	**460**	< 5.0	**160**	**16**	**8.0**	**0.91**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 2,500	**7,400**	< 250	**910**	< 250	< 250	< 250	< 250	**12**	**2.2**	**0.7**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/13/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	**2,800**	< 5.0	**440**	< 5.0	**78**	< 5.0	**150**	< 50	**2.8**	**0.86**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 2,000	**2,600**	< 100	**310**	< 100	**600**	< 100	**230**	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
	7/25/2012	N	< 2,000	**1,100**	< 100	**120**	< 100	**210**	< 100	< 100	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
	1/19/2012	N	< 50	**3,500**	< 6.0	**360**	< 10	**830**	< 1.3	**300**	**42 D**	**49 D**	**4.0 JD**	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 0.96	< 2.1
MW-510BR	1/14/2015	N	< 50	**1,100**	< 5.0	**180**	< 5.0	**190**	< 5.0	**200**	**7.8**	**2.7**	**0.86**	**0.17**	**0.13**	**0.13**	< 0.10	< 0.050	**0.14**	< 0.10
	7/16/2014	N	< 50	**25**	< 5.0	**20**	< 5.0	**30**	< 5.0	**24**	< 0.50	< 1.0	**0.31**	**0.11**	**0.096**	< 0.10	< 0.10	< 0.050	**0.095**	< 0.10
	1/9/2014	N	< 50	**32**	< 5.0	**47**	< 5.0	**52**	< 5.0	**66**	**4.8**	< 1.0	**0.78**	**0.12**	**0.07**	< 0.10	<0.10	< 0.050	**0.081**	< 0.10
	7/11/2013	N	< 2,500	**22,000**	< 250	**1,200**	< 250	**10,000**	< 250	**2,700**	**53**	< 100	**5.8**	**0.76**	**0.52**	**0.42**	**0.18**	**0.16**	**0.68**	< 0.10
	7/11/2013	DUP-05	< 2,500	**6,300**	< 250	**310**	< 250	**2,900**	< 250	**690**	**15**	**5.1**	**3.0**	**1.2**	**1.1**	**0.89**	**0.58**	**0.36**	**1.0**	**0.10**
	1/10/2013	N	< 500	**370**	< 25	**160**	< 25	**350**	< 25	**230**	**21**	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19
	7/24/2012	N	< 10,000	**7,800**	< 500	**1,200**	< 500	**4,700**	< 500	**1,500**	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190	< 190
	1/23/2012	N	< 100	**5,400**	< 12	**590**	< 20	**2,600**	< 2.6	**930**	**39**	**110**	< 11	< 11	< 11	< 11	< 11	< 11	< 5.1	< 11
MW-511BR	1/14/2015	N	< 50	**450**	< 5.0	**17**	< 5.0	**35**	< 5.0	**12**	**3.3**	< 1.0	**0.081**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/15/2014	N	< 50	**670**	< 5.0	**55**	< 5.0	**75**	< 5.0	**35**	**1.8**	< 1.0	**0.081**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2014	DUP-04	< 50	**590**	< 5.0	**59**	< 5.0	**88**	< 5.0	**40**	**1.8**	< 1.0	**0.097**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2014	N	< 50	**2,500**	< 5.0	**180**	< 5.0	**850**	< 5.0	**250**	**3.5**	**1.1**	**0.42**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	**85**	**1,200**	< 5.0	**150**	< 5.0	**410**	< 5.0	**190**	**5.2**	**1.3**	**0.35**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 2,000	**3,400**	< 100	**200**	< 100	**1,100**	< 100	**280**	**5**	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
	7/26/2012	N	< 2,000	**1,900**	< 100	**120**	< 100	**630**	< 100	**160**	**4.6**	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3
	1/25/2012	N	< 250	**4,000**	< 30	**220 J**	< 50	**1,200**	< 6.5	**350**	**8.4**	**2.6**	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 0.47	< 1.0
MW-512BR	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.5**	< 1.0	**0.051**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/17/2014	N	< 50	**12**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3**	< 1.0	**0.088**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/14/2014	N	< 50	**5.2**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.95**	< 1.0	**0.072**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	**85**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.7**	< 1.0	**0.066**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/10/2013	N	< 100	**150**	< 5.0	**8.4**	< 5.0	< 5.0	< 5.0	< 5.0	**1.2**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
	7/26/2012	N	< 500	**1,300 D**	< 25	< 25	< 25	< 25	< 25	< 25	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19
	1/25/2012	N	< 5.0	**40.0**	< 0.60	**8.4**	< 1.0	< 0.33	< 0.13	**1.4 J**	**2.4**	**0.16 J**	**0.11 J**	< 0.11	< 0.11	< 0.11*	< 0.11	< 0.11	< 0.049	< 0.11
MW-513BR	1/14/2015	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.3**	< 1.0	**0.082**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/16/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.8**	< 1.0	**0.068**	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/8/2014	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.50	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	7/11/2013	N	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.4**	< 1.0	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.10
	1/9/2013	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.5**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	7/24/2012	N	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.9**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	2/6/2012	N	< 5.0	**2.1 J**	< 0.60	**0.25 J**	< 1.0	< 0.33	**0.31 J**	**0.33 J**	**6.9**	**0.16 J**	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.049	< 0.11

Notes:
N = Normal sample
DUP = Duplicate sample
VAULT - Pump and Treat well sampled from manifold inside well vault
BOLD=Analyte was detected above laboratory detecti
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond specified holding time
*MW-307BR and MW-308BR were resampled due to anomalous results likely due to rainwater infiltration through manifest attached to well. Resampled results are shown in the table.

Table 2-3
Groundwater Analytical Results for Bedrock Wells

Category			SVOCs						Inorganics													
Constituent			Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Thallium	Vanadium	Zinc
Type 1 RRS			1,000	1,000	0.4	20	10	1,000	0.006	0.01	2	0.004	0.005	0.1	1.3	0.2	0.015	0.002	0.1	0.05	0.002	0.2	2
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-213	1/13/2015	N	**1.3**	**51**	< 0.050	**14,000**	**52**	**1.3**	< 0.0200	< 0.0500	**0.927**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.014**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	< 0.10	**1.3**	< 0.050	< 0.50	**0.83**	< 0.050	< 0.0200	< 0.0500	**0.658**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	**0.77**	**15**	< 0.050	**6,400**	**23**	**0.75**	< 0.0200	< 0.0500	**0.846**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.016**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	**0.59**	**23**	< 0.050	**6,700**	**22**	**0.57**	< 0.0200	< 0.0500	**0.912**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 220	< 220	< 220	**5,900**	< 220	< 220	< 0.020	< 0.020	**0.900**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.015**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 210	< 210	< 210	**6,000**	< 210	< 210	< 0.020	< 0.020	**0.96**	< 0.0040	< 0.0050	< 0.010	< 0.020	**0.021**	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/18/2012	N	**1.1 J**	**20**	< 0.096	**1600 D**	**34**	**1.1 J**	< 0.0053	< 0.0046	**0.87**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	**0.017**	< 0.0040	< 0.000091	**0.0024 J**	< 0.0064	< 0.00025	**0.0024 J**	**0.011 J**
MW-306BR	1/14/2015	N	< 0.10	**0.59**	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.535**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	< 0.10	**1.4**	< 0.050	**210**	**0.49**	**0.057**	< 0.0200	< 0.0500	**0.46**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	< 0.10	**1.7**	< 0.050	**320**	**1.1**	**0.058**	< 0.0200	< 0.0500	**0.474**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0436**	< 0.0100	**0.0257**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0217**
	1/9/2013	N	< 0.20	**0.39**	< 0.20	**0.21**	< 0.20	< 0.20	< 0.020	< 0.020	**0.45**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 3.8	< 3.8	< 3.8	**86**	< 3.8	< 3.8	< 0.020	< 0.020	**0.49**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/17/2012	N	< 0.10	**0.59**	< 0.10	**110**	**0.50**	< 0.10	< 0.0053	< 0.0046	**0.52**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	**0.011**	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-307BR*	1/16/2015	Vault	**3.5**	**48**	< 0.050	**6,700**	**46**	**4.1**	< 0.0200	< 0.0500	**0.804**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0746**
	1/15/2015	DUP-04	**3.1**	**46**	< 0.050	**8,100**	**44**	**3.6**	< 0.0200	< 0.0500	**0.826**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0802**
	7/16/2014	Vault	**3.5**	**52**	< 0.050	**7,700**	**55**	**3.6**	< 0.0200	< 0.0500	**0.862**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	**0.0247**	< 0.0200	< 0.0200	< 0.0100	**0.084**
	7/16/2014	DUP-06	**3.4**	**57**	< 0.050	**8,700**	**56**	**3.6**	< 0.0200	< 0.0500	**0.874**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	**0.026**	< 0.0200	< 0.0200	< 0.0100	**0.0891**
	1/10/2014	Vault	**3.6**	**55**	< 0.050	**9,600**	**57**	**3.7**	< 0.0200	< 0.0500	**0.893**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0897**
	1/10/2014	DUP-04	**3.5**	**54**	< 0.050	**8,400**	**53**	**3.6**	< 0.0200	< 0.0500	**0.888**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0906**
	8/13/2013	Vault	**3.3**	**37**	< 0.050	**6,100**	**37**	**3.3**	< 0.0200	< 0.0500	**0.905**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	--	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0264**
	8/13/2013	DUP-01	**2.6**	**33**	< 0.050	**5,000**	**32**	**2.8**	< 0.0200	< 0.0500	**0.954**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	--	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.117**
	1/9/2013	Vault	< 190	< 190	< 190	**4,100**	< 190	< 190	< 0.020	< 0.020	**0.87**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	**0.064**	< 0.020	< 0.0010	< 0.010	**0.11**
	1/9/2013	DUP-03	< 190	< 190	< 190	**3,800**	< 190	< 190	< 0.020	< 0.020	**0.8**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	**0.061**	< 0.020	< 0.0010	< 0.010	**0.11**
	7/24/2012	N	< 190	< 190	< 190	**7,500**	< 190	< 190	< 0.020	< 0.020	**0.89**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.050**
	7/24/2012	DUP-01	< 190	< 190	< 190	**6,400**	< 190	< 190	< 0.020	< 0.020	**0.87**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.057**
	1/23/2012	N	< 11	**57**	< 11	**10,000 D**	**57**	< 11	< 0.0053	< 0.0046	**0.92**	**0.00029 J**	< 0.0020	< 0.0012	**0.0052 J**	< 0.0050	**0.0051 J**	< 0.000091	**0.014 J**	< 0.0064	< 0.00025	< 0.0024	**0.13**
	1/23/2012	DUP-05	< 11	**53**	< 11	**8,700 D**	**52**	< 11	**0.0057 J**	< 0.0046	**0.96**	**0.00029 J**	< 0.0020	< 0.0012	**0.0043 J**	< 0.0050	< 0.0040	< 0.000091	**0.010 J**	< 0.0064	< 0.00025	< 0.0024	**0.079**
MW-308BR*	1/29/2015	Vault	**12**	**22**	**4.8**	**3,400**	**28**	**17**	< 0.0200	< 0.0500	**1.11**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0472**
	1/29/2015	DUP-05	**12**	**21**	**4.9**	**3,200**	**29**	**19**	< 0.0200	< 0.0500	**1.15**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0508**
	7/16/2014	Vault	**58**	**74**	**8.9**	**5,600**	**180**	**71**	< 0.0200	< 0.0500	**0.554**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	**0.0203**	< 0.0200	< 0.0200	< 0.0100	**0.0659**
	7/16/2014	DUP-05	**35**	**64**	**5.2**	**6,100**	**120**	**43**	< 0.0200	< 0.0500	**0.548**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0339**
	1/10/2014	Vault	**44**	**64**	**5.2**	**5,200**	**160**	**57**	< 0.0200	< 0.0500	**0.549**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.121**
	1/10/2014	DUP-05	**23**	**56**	**2.3**	**5,100**	**110**	**29**	< 0.0200	< 0.0500	**0.531**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.122**
	8/13/2013	Vault	**38**	**60**	**3.7**	**3,900**	**140**	**44**	< 0.0200	< 0.0500	**0.576**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	--	< 0.0100	< 0.00020	**0.0390**	< 0.0200	< 0.0200	< 0.0100	**0.0803**
	1/9/2013	Vault	**270**	**260**	< 190	**5,200**	**760**	**400**	< 0.020	< 0.020	**0.55**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	**0.92**	< 0.020	< 0.0010	< 0.010	**0.091**
	1/9/2013	DUP-04	**290**	**210**	< 200	**4,400**	**670**	**430**	< 0.020	< 0.020	**0.55**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	**0.93**	< 0.020	< 0.0010	< 0.010	**0.089**
	7/24/2012	N	< 190	< 190	< 190	**4,400**	< 190	< 190	< 0.020	< 0.020	**0.54**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.050**
	7/24/2012	DUP-02	< 190	< 190	< 190	**4,200**	< 190	< 190	< 0.020	< 0.020	**0.54**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.050**
	1/20/2012	N	**49**	**83**	**6.2**	**4,400**	**160**	**62**	< 0.0053	< 0.0046	**0.56**	**0.00020 J**	< 0.0020	< 0.0012	**0.020**	< 0.0050	**0.013**	< 0.000091	**0.53**	< 0.0064	< 0.00025	< 0.0024	**0.97**
	1/20/2012	DUP-04	**49**	**62**	**7.1 J**	**4,000**	**150**	**60**	< 0.0053	**0.0053 J**	**0.54**	< 0.00020	< 0.0020	**0.0013 J**	**0.011 J**	< 0.0050	**0.011**	< 0.000091	**0.97**	< 0.0064	< 0.00025	< 0.0024	**1.1**
MW-309BR	1/13/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.410**	< 0.0100	**0.0073**	< 0.0100	**0.0214**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/29/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.143**	< 0.0100	< 0.0050	< 0.0100	**0.0348**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0398**	< 0.0100	**0.0086**	< 0.0100	**0.0481**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	**0.055**	< 0.050	< 0.0200	< 0.0500	**0.245**	< 0.0100	< 0.0050	< 0.0100	**0.0105**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.148**	< 0.0100	**0.0113**	< 0.0100	**0.0759**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.2**	< 0.0040	**0.0056**	< 0.010	**0.030**	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.021**
	7/23/2012	N	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.47**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
	1/17/2012	N	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.20**	< 0.00020	< 0.0020	< 0.0012	**0.028**	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0035 J**	< 0.0087
MW-310BR	1/12/2015	N	< 0.10	< 0.10	< 0.050	**7.6**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.142**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.192**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.261**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.209**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.020	< 0.020	**0.23**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.19	< 0.19	< 0.19	**0.25**	< 0.19	< 0.19	< 0.020	< 0.020	**0.2**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/17/2012	N	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.0053	< 0.0046	**0.21**	< 0.00020	< 0.0020	< 0.0012	**0.0026 J**	< 0.0050	< 0.0040	< 0.000091	**0.0030 J**	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-313	1/13/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.141**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0564**
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.197**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.151**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0501**
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.145**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.18**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.19	< 0.19	< 0.19	**2.3**	< 0.19	< 0.19	< 0.020	< 0.020	**0.14**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/17/2012	N	< 0.098	< 0.098	< 0.098	**0.89**	< 0.098	< 0.098	< 0.0053	< 0.0046	**0.12**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0053 J**	< 0.0087
MW-315	1/13/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.455**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/13/2015	DUP-02	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.459**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.399**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	DUP-01	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	**0.051**	< 0.0200	< 0.0500	**0.413**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2014	N	<0.10	< 0.10	**0.16**	**0.61**	<0.050	**0.091**	< 0.0200	< 0.0500	**0.473**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2014	DUP-03	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.480**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	**0.54**	< 0.10	**0.51**	**2.9**	**0.094**	**0.41**	< 0.0200	< 0.0500	**0.487**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	**14**	< 1.9	**15**	< 1.9	< 1.9	**9.0**	< 0.020	< 0.020	**0.49**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/8/2013	DUP-01	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.48**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.020	< 0.020	**0.52**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.024**
	7/25/2012	DUP-03	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.020	< 0.020	**0.53**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/18/2012	N	**0.82**	< 0.11	**1**	**0.41**	< 0.11	**0.69**	< 0.0053	< 0.0046	**0.53**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
	1/18/2012	DUP-02	< 0.11	< 0.11	< 0.11	**2.5**	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.54**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087

Table 2-3
Groundwater Analytical Results for Bedrock Wells

Category			SVOCs						Inorganics													
Constituent			Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Thallium	Vanadium	Zinc
Type 1 RRS			1,000	1,000	0.4	20	10	1,000	0.006	0.01	2	0.004	0.005	0.1	1.3	0.2	0.015	0.002	0.1	0.05	0.002	0.2	2
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-318	1/14/2015	N	<1.0	**4.6**	< 0.50	**920**	**4.5**	< 0.5	< 0.0200	< 0.0500	**0.551**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	**0.36**	**5**	< 0.050	**730**	**4.6**	**0.38**	< 0.0200	< 0.0500	**0.524**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/27/2014	N	<0.10	**0.48**	< 0.050	**7.3**	**0.36**	**0.050**	< 0.0200	< 0.0500	**0.289**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	**0.32**	**4.5**	< 0.050	**820**	**4.0**	**0.30**	< 0.0200	< 0.0500	**0.556**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.011**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0203**
	7/11/2013	DUP-03	**0.34**	**4.6**	< 0.050	**820**	**4.1**	**0.33**	< 0.0200	< 0.0500	**0.560**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 2.0	< 2.0	< 2.0	**160**	< 2.0	< 2.0	< 0.020	< 0.020	**0.3**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 210	< 210	< 210	**880**	< 210	< 210	< 0.020	< 0.020	**0.54**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	2/6/2012	N	< 9.9	< 9.9	< 9.9	**550**	< 9.9	< 9.9	**0.0063 JB**	< 0.0046	**0.72**	**0.00031 J**	< 0.0020	**0.0030 JB**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0040 J**	**0.022**
MW-319	1/14/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.642**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	**0.056**	< 0.0200	< 0.0500	**0.132**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/7/2014	N	**0.10**	< 0.10	**0.29**	< 0.50	< 0.050	**0.085**	< 0.0200	< 0.0500	**0.692**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.668**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.93**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/23/2012	N	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.0053	< 0.0046	**0.73**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	**0.0023 J**	< 0.0064	< 0.00025	< 0.0024	< 0.0087
	1/18/2012	N	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.28**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	**0.0043 J**	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	**0.0094 J**
MW-320	1/12/2015	N	< 0.10	< 0.10	< 0.050	**13**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0287**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.268**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/6/2014	N	< 0.10	< 0.10	**0.090**	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.264**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	**0.12**	< 0.10	< 0.050	< 0.50	< 0.050	**81**	< 0.0200	< 0.0500	**0.267**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.096**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/23/2012	N	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.0053	< 0.0046	**0.26**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
	1/16/2012	N	**0.43**	< 0.11	**0.15 J**	< 0.11	**0.11 J**	**0.30**	< 0.0053	< 0.0046	**0.29**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-321	1/13/2015	N	< 0.10	< 0.10	< 0.050	**5.7**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0606**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/14/2014	N	< 0.10	**0.48**	< 0.050	**3.3**	**0.7**	**0.11**	< 0.0200	< 0.0500	**0.0573**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0662**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	**0.12**	**2.2**	< 0.050	**240**	**1.8**	**0.096**	< 0.0200	< 0.0500	**0.244**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	DUP-01	**0.11**	**2.1**	< 0.050	**150**	**1.7**	**0.100**	< 0.0200	< 0.0500	**0.237**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 0.19	**0.94**	< 0.19	**13**	**1.1**	< 0.19	< 0.020	< 0.020	**0.14**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 0.19	**0.29**	< 0.19	**3.9**	**0.48**	< 0.19	< 0.020	< 0.020	**0.094**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/24/2012	N	**0.28**	**7.2**	< 0.095	**1,100 D**	**5.8**	**0.29**	< 0.0053	< 0.0046	**0.30**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-324	1/13/2015	N	< 0.10	< 0.10	< 0.050	**5.3**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0232**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0205**
	7/14/2014	N	< 0.10	< 0.10	< 0.050	**0.7**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0657**	< 0.0100	< 0.0050	< 0.0100	**0.0176**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	< 0.10	< 0.10	< 0.050	**0.98**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0674**	< 0.0100	< 0.0050	< 0.0100	**0.0161**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0693**	< 0.0100	**0.0066**	< 0.0100	**0.0192**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0337**
	1/9/2013	N	< 0.19	< 0.19	< 0.19	**0.70**	< 0.19	< 0.19	< 0.020	< 0.020	**0.061**	< 0.0040	**0.0073**	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 0.19	< 0.19	< 0.19	**3.9**	< 0.19	< 0.19	< 0.020	< 0.020	**0.089**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/24/2012	N	< 0.095	< 0.095	< 0.095	**6.1**	**0.15 J**	< 0.095	< 0.0053	< 0.0046	**0.081**	< 0.00020	< 0.0020	< 0.0012	**0.0040 J**	< 0.0050	< 0.0040	< 0.000091	**0.0028 J**	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-325	1/13/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0553**	< 0.0100	**0.0090**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0573**
	7/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0744**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/6/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0326**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/9/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0284**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.026**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/23/2012	N	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.0053	< 0.0046	**0.022**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0029 J**	< 0.0087
	1/16/2012	N	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.0053	**0.0047 J**	**0.25**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0034 J**	< 0.0087
MW-500BR	1/14/2015	N	**0.51**	**14**	< 0.050	**2,800**	**12**	**0.59**	< 0.0200	< 0.0500	**0.364**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0686**
	7/16/2014	N	**0.2**	**5.3**	< 0.050	**770**	**4.4**	**0.18**	< 0.0200	< 0.0500	**0.347**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.089**
	1/8/2014	N	**0.31**	**9.4**	< 0.050	**2,500**	**6.6**	**0.31**	< 0.0200	< 0.0500	**0.441**	< 0.0100	**0.0096**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.161**
	7/9/2013	N	< 0.10	**1.6**	< 0.050	**460**	**0.067**	**0.093**	< 0.0200	< 0.0500	**0.475**	< 0.0100	**0.0108**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.111**
	1/10/2013	N	< 19	< 19	< 19	**770**	< 19	< 19	< 0.020	< 0.020	**0.45**	< 0.0040	**0.0081**	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.056**
	7/26/2012	N	< 210	< 210	< 210	**1,600**	< 210	< 210	< 0.020	< 0.020	**0.5**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.063**
	1/18/2012	N	**0.31**	**2.6**	< 0.10	**3,100**	**9.2**	**0.32**	< 0.0053	< 0.0046	**0.57**	< 0.00020	**0.0029 J**	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	**0.0027 J**	< 0.0064	< 0.00025	< 0.0024	**0.063**
MW-503BR	1/15/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	<0.0200	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0378**
	7/16/2014	N	< 0.10	**0.36**	< 0.050	< 0.50	**0.23**	< 0.050	< 0.0200	< 0.0500	**0.0202**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/13/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	<0.0200	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0365**
	7/11/2013	N	< 0.10	**0.28**	< 0.050	**5.1**	**0.18**	< 0.050	< 0.0200	< 0.0500	**0.0214**	< 0.0100	**0.0103**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0641**
	1/10/2013	N	< 0.20	**0.98**	< 0.20	**1.1**	**0.99**	< 0.20	< 0.020	< 0.020	**0.071**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.069**
	7/26/2012	N	< 20	< 20	< 20	**290 D**	< 20	< 20	< 0.020	< 0.020	**0.046**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/19/2012	N	**0.14 J**	**0.17 J**	< 0.096	**1.6**	**0.13 J**	**0.21**	< 0.0053	< 0.0046	**0.034**	< 0.00020	< 0.0020	< 0.0012	**0.0030 J**	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	**0.024**
MW-504BR	1/14/2015	N	< 0.10	< 0.10	< 0.050	**0.65**	**0.088**	< 0.050	< 0.0200	< 0.0500	**0.184**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.021**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.121**
	7/16/2014	N	**0.11**	**1.2**	< 0.050	< 0.50	**1.3**	**0.12**	< 0.0200	< 0.0500	**0.155**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.013**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0429**
	1/8/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	**0.056**	< 0.050	< 0.0200	< 0.0500	**0.105**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.248**
	7/10/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.126**	< 0.0100	< 0.0050	< 0.0100	**0.0110**	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.327**
	1/10/2013	N	< 0.20	**0.27**	< 0.20	**12**	**0.24**	< 0.20	< 0.020	< 0.020	**0.18**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	**0.00078**	< 0.040	< 0.020	< 0.0010	< 0.010	**0.029**
	7/26/2012	N	< 0.22	**0.22**	< 0.22	< 0.22	< 0.22	< 0.22	< 0.020	< 0.020	**0.19**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.027**
	1/19/2012	N	< 0.96	**1.2 J**	< 0.96	**91**	**1.0 J**	< 0.96	< 0.0053	< 0.0046	**0.26**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	**0.013**	< 0.0040	< 0.000091	**0.0026 J**	< 0.0064	< 0.00025	< 0.0024	**0.0097 J**
MW-506BR	1/13/2015	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/16/2014	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/8/2014	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/10/2013	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2013	DESTROYED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/26/2012	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.45**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/25/2012	N	**0.12 J**	< 0.097	**0.56**	**0.47**	< 0.097	**0.15 J**	< 0.0053	< 0.0046	**0.40**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.005	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0041 J**	< 0.0087

Table 2-3
Groundwater Analytical Results for Bedrock Wells

Category			SVOCs						Inorganics													
Constituent			Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide	Lead	Mercury	Nickel	Selenium	Thallium	Vanadium	Zinc
Type 1 RRS			1,000	1,000	0.4	20	10	1,000	0.006	0.01	2	0.004	0.005	0.1	1.3	0.2	0.015	0.002	0.1	0.05	0.002	0.2	2
Location ID	Date	Type	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-507BR	1/15/2015	N	< 0.10	< 0.10	**0.072**	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0698**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0618**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/13/2014	N	< 0.10	< 0.10	< 0.050	**1.4**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0697**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0798**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/10/2013	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.22**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/26/2012	N	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.020	< 0.020	**0.2**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/19/2012	N	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.0053	< 0.0046	**0.078**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.005	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0028 J**	< 0.0087
MW-508BR	1/15/2015	N	< 0.10	< 0.10	**0.067**	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.614**	< 0.0100	< 0.0050	**0.0137**	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.566**	< 0.0100	< 0.0050	**0.0216**	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/14/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.708**	< 0.0100	< 0.0050	**0.0179**	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/10/2013	N	< 0.10	< 0.10	< 0.050	**1.6**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.650**	< 0.0100	< 0.0050	**0.0101**	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2013	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.68**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/25/2012	N	< 0.19	< 0.19	< 0.19	**0.59**	< 0.19	< 0.19	< 0.020	< 0.020	**0.72**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/19/2012	N	< 0.10	< 0.10	< 0.10	**0.24**	< 0.10	< 0.10	< 0.0053	< 0.0046	**0.68**	< 0.00020	< 0.0020	**0.0017 J**	**0.0021 J**	< 0.005	< 0.0040	< 0.000091	**0.0055 J**	< 0.0064	< 0.00025	**0.0086 J**	< 0.0087
MW-509BR	1/15/2015	N	**0.45**	**6.5**	< 0.050	**810**	**7.9**	**0.52**	< 0.0200	< 0.0500	**0.128**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.109**
	7/17/2014	N	**0.32**	**4.4**	< 0.050	**290**	**5.2**	**0.35**	< 0.0200	< 0.0500	**0.419**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0395**
	1/13/2014	N	< 0.10	< 0.10	< 0.050	**1.1**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.0262**	< 0.0100	**0.0058**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.258**
	7/11/2013	N	**0.52**	**5.1**	< 0.050	**830**	**6.3**	**0.49**	< 0.0200	< 0.0500	**0.157**	< 0.0100	**0.0091**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.183**
	1/10/2013	N	< 20	< 20	< 20	**610**	< 20	< 20	< 0.020	< 0.020	**0.26**	< 0.0040	**0.0053**	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.12**
	7/25/2012	N	< 20	< 20	< 20	**300**	< 20	< 20	< 0.020	< 0.020	**0.30**	< 0.0040	**0.0062**	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.11**
	1/19/2012	N	< 2.1	**31 D**	< 2.1	**2700 D**	**34 D**	< 2.1	< 0.0053	< 0.0046	**0.25**	< 0.00020	**0.0033 J**	< 0.0012	< 0.0019	**0.0054 J**	< 0.0040	< 0.000091	**0.0038 J**	< 0.0064	< 0.00025	< 0.0024	**0.072**
MW-510BR	1/14/2015	N	**0.78**	**4.7**	**0.058**	**300**	**5.6**	**0.97**	< 0.0200	< 0.0500	**0.109**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0939**
	7/16/2014	N	**0.44**	**0.61**	< 0.050	**0.64**	**0.66**	**0.45**	< 0.0200	< 0.0500	**0.0515**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.012**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0623**
	1/9/2014	N	**0.81**	**4.7**	< 0.050	< 0.50	**0.96**	**0.89**	< 0.0200	< 0.0500	**0.326**	<0.0200	< 0.0100	**0.0089**	< 0.0100	< 0.0100	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.165**
	7/11/2013	N	**4.0**	**42**	**0.15**	**2,400**	**47**	**4.4**	< 0.0200	< 0.0500	**0.326**	< 0.0100	**0.0063**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.124**
	7/11/2013	DUP-05	**3.1**	**14**	**0.45**	**0.65**	**17**	**3.9**	< 0.0200	< 0.0500	**0.13**	< 0.0100	**0.0298**	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.573**
	1/10/2013	N	< 19	< 19	< 19	**680**	< 19	< 19	< 0.020	< 0.020	**0.049**	< 0.0040	**0.0062**	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.14**
	7/24/2012	N	< 190	< 190	< 190	**3,600**	< 190	< 190	< 0.020	< 0.020	**0.29**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	**0.028**
	1/23/2012	N	< 11	**39**	< 11	**4700 D**	**37**	< 11	< 0.0053	< 0.0046	**0.28**	< 0.00020	< 0.0020	< 0.0012	**0.0026 J**	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	**0.0030 J**	**0.015 J**
MW-511BR	1/14/2015	N	< 0.10	**0.89**	< 0.050	**150**	**0.76**	**0.055**	< 0.0200	< 0.0500	**0.0678**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/15/2014	N	< 0.10	**0.84**	< 0.050	**75**	**0.7**	**0.051**	< 0.0200	< 0.0500	**0.0609**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2014	DUP-04	< 0.10	**0.83**	< 0.050	**85**	**0.73**	**0.054**	< 0.0200	< 0.0500	**0.0598**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2014	N	**0.15**	**2.3**	< 0.050	**390**	**2.5**	**0.15**	< 0.0200	< 0.0500	**0.256**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	**0.17**	**3.5**	< 0.050	**260**	**2.3**	**0.19**	< 0.0200	< 0.0500	**0.268**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	**0.014**	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/10/2013	N	< 2.1	**3.9**	< 2.1	**180**	**3.4**	< 2.1	< 0.020	< 0.020	**0.30**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/26/2012	N	< 4.3	**4.4**	< 4.3	**120**	< 4.3	< 4.3	< 0.020	< 0.020	**0.33**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/25/2012	N	< 1.0	**7**	< 1.0	**310 D**	**7.6**	< 1.0	< 0.0053	< 0.0046	**0.41**	< 0.00020	< 0.0020	**0.0012 J**	< 0.0019	< 0.0050	< 0.0040	< 0.000091	**0.013 J**	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-512BR	1/14/2015	N	< 0.10	**0.28**	**0.081**	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.154**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/17/2014	N	< 0.10	**0.37**	< 0.050	**3.7**	**0.27**	< 0.050	< 0.0200	< 0.0500	**0.192**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/14/2014	N	< 0.10	**0.22**	< 0.050	< 0.50	**0.44**	**0.11**	< 0.0200	< 0.0500	**0.256**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	7/11/2013	N	< 0.10	**0.30**	< 0.050	**7.4**	**0.41**	**0.075**	< 0.0200	< 0.0500	**0.171**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/10/2013	N	< 0.19	< 0.19	< 0.19	**15**	< 0.19	< 0.19	< 0.020	< 0.020	**0.13**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/26/2012	N	< 19	< 19	< 19	**320**	< 19	< 19	< 0.020	< 0.020	**0.23**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	1/25/2012	N	**0.14 J**	**0.57**	< 0.11	**0.84**	**0.71**	**0.18 J**	< 0.0053	< 0.0046	**0.13**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	**0.0068 J**	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087
MW-513BR	1/14/2015	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.711**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	**0.0224**
	7/16/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.635**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/8/2014	N	< 0.10	< 0.10	< 0.050	< 0.50	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.115**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	**0.0108**	< 0.0200
	7/11/2013	N	< 0.10	**0.19**	< 0.050	**1.9**	< 0.050	< 0.050	< 0.0200	< 0.0500	**0.749**	< 0.0100	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.00020	< 0.0200	< 0.0200	< 0.0200	< 0.0100	< 0.0200
	1/9/2013	N	< 0.20	< 0.20	< 0.20	**2.6**	< 0.20	< 0.20	< 0.020	< 0.020	**0.72**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	7/24/2012	N	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.020	< 0.020	**0.79**	< 0.0040	< 0.0050	< 0.010	< 0.020	< 0.010	< 0.010	< 0.00020	< 0.040	< 0.020	< 0.0010	< 0.010	< 0.020
	2/6/2012	N	< 0.11	**0.40**	< 0.11	**2.2**	< 0.11	**0.11 J**	< 0.0053	< 0.0046	**0.74**	< 0.00020	< 0.0020	< 0.0012	< 0.0019	< 0.0050	< 0.0040	< 0.000091	< 0.0023	< 0.0064	< 0.00025	< 0.0024	< 0.0087

Notes:
N = Normal sample
DUP = Duplicate sample
VAULT - Pump and Treat well sampled from manifold inside well vault
BOLD=Analyte was detected above laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond specified holding time
*MW-307BR and MW-308BR were resampled due to anomalous results likely due to rainwater infiltration through manifest attached to well. Resampled results are shown in the table.

Prepared By: KPH 03/23/15
Checked By: SAG 03/26/15

Table 2-4
Site Delineation and Cleanup Standards

Media	Soil											Groundwater		
RRS	Delineation		Type 1	Type 2	Type 2	Type 2	Type 3	Type 3	Type 4	Type 4	Type 4	Delineation	Type 1	
	Surface Soils (0-2 ft bgs)	Subsurface Soils (+2 ft bgs)		Based on Leaching to GW	Based on Direct Contact	Based on Minimum of Direct Contact & Leaching to GW (a)	Based on Direct Contact and Leaching Surface Soil (a)	Based on Leaching to GW Subsurface Soil	Based on Leaching to GW	Industrial Worker Direct Contact	Construction Worker Direct Contact	Background	Ingestion or Contact	Vapor Intrusion
Chemical	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	ug/L	ug/L
BTEX														
Benzene	DL	DL	0.5	(b)	5.0	5.0	0.50	0.50	(b)	24	48		5	180
Ethylbenzene	DL	DL	70	110	1600	110	70	70	340	9200	13000		700	476
Toluene	DL	DL	100	80	540	80	100	100	600	2700	5100		1000	487
Xylenes (total)	DL	DL	1000	4900	100000 (c)	4900	1000	1000	32000	1.0E+05*	1.0E+05*		10000	--
VOCs														
1,1,2-Trichloroethane	DL	DL	14	0.12	10	0.12	18	20	1.1	18	1537	DL	--	--
1,1-Dichloroethene	DL	DL	0.70	0.21	0.57	0.21	0.70	0.70	0.21	0.97	89	DL	--	--
1,2-Dichloroethane	DL	DL	0.50	0.055	3.2	0.055	0.50	0.50	0.055	5	500	DL	--	--
Acetone	DL	DL	400	17	70000	17	400	400	42	1.0E+05*	1.0E+05*	DL	4000	
Bromomethane	DL	DL	1.0	0.86	1.7	0.86	1.0	1.0	0.86	8.0	16	DL	--	--
Carbon disulfide	DL	DL	400	98	180	98	400	400	98	920	1800	DL	4000	--
Chloroethane	DL	DL	1.0	66	3100	66	1.0	1.0	330	15000	30200	DL	--	--
Chloroform	DL	DL	10	2.0	35	2.0	10	10	2.0	58	4300	DL	--	--
Methylene chloride	DL	DL	0.50	0.48	93	0.48	0.50	0.50	1.1	160	10000	DL	5	--
Styrene	DL	DL	14	170	3800	170	14	14	1000	23000	31000	DL	--	--
Tetrachloroethene	DL	DL	0.50	0.94	87	0.94	0.50	0.50	2.7	170	4300	DL	--	--
Trichloroethene	DL	DL	0.50	1.5	52	1.5	0.50	0.50	2.8	88	7700	DL	5	--
PAHs														
2-Methylnaphthalene	DL	DL	100	(b)	110	110	100	100	(b)	560	990	DL	--	--
Acenaphthene	DL	DL	300	(b)	4700	4700	300	300	17000	1.0E+05*	26000	DL	2000	--
Acenapthylene	DL	DL	130	590	2300	590	130	130	3900	61000	100000 (c)	DL	10	--
Anthracene	DL	DL	500	(b)	23000	23000	500	500	100000 (c)	1.0E+05*	100000 (c)	DL	10	--
Benzo(a)anthracene	DL	DL	5.0	(b)	12	12	5.0	5.0	(b)	78	820	DL	0.1	--
Benzo(a)pyrene	0.448	DL	1.6	(b)	1.2	1.2	1.6	1.6	(b)	8	82	DL	0.2	--
Benzo(b)fluoranthene	0.848	DL	5.0	(b)	12	12	5.0	5.0	(b)	78	820	DL	0.2	--
Benzo(ghi)perylene	DL	DL	500	(b)	2300	2300	500	500	(b)	61000	13000	DL	10	--
Benzo(k)fluoranthene	DL	DL	5.0	(b)	130	130	5.0	5.0	(b)	780	8200	DL	10	--
Chrysene	0.534	DL	5.0	(b)	1300	1300	5.0	5.0	(b)	7800	82000	DL	0.2	--
Dibenzo(a,h)anthracene	DL	DL	2.0	(b)	1.2	1.2	5.0	5.0	(b)	7.8	82	DL	0.3	--
Dibenzofuran	DL	DL	NA	54	NC	54	ND	NC	54	ND	ND	DL	--	--
Fluoranthene	0.525	DL	500	(b)	3100	3100	500	500	(b)	82000	17000	DL	1000	--
Fluorene	DL	DL	360	(b)	3100	3100	360	360	23000	82000	17000	DL	1000	--
Indeno(1,2,3-cd)pyrene	DL	DL	5.0	(b)	12	12	5.0	5.0	(b)	78	820	DL	0.4	--
Naphthalene	DL	DL	100	(b)	61	61	100	100	(b)	310	580	DL	20	--
Phenanthrene	0.439	DL	110	(b)	2300	2300	110	110	37000	61000	13000	DL	10	--
Pyrene	0.952	DL	500	(b)	2300	2300	500	500	(b)	61000	13000	DL	1000	--

Table 2-4
Site Delineation and Cleanup Standards

Media	Soil											Groundwater		
RRS	Delineation		Type 1	Type 2	Type 2	Type 2	Type 3	Type 3	Type 4	Type 4	Type 4	Delineation	Type 1	
	Surface Soils (0-2 ft bgs)	Subsurface Soils (+2 ft bgs)		Based on Leaching to GW	Based on Direct Contact	Based on Minimum of Direct Contact & Leaching to GW (a)	Based on Direct Contact and Leaching Surface Soil (a)	Based on Leaching to GW Subsurface Soil	Based on Leaching to GW	Industrial Worker Direct Contact	Construction Worker Direct Contact	Background	Ingestion or Contact	Vapor Intrusion
Chemical	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	ug/L	ug/L
Phenolics														
2,4-Dimethylphenol	DL	DL	70	61	1600	61	70	70	180	41000	8500		--	--
Phenol	DL	DL	400	150	47000	150	400	400	950	1.0E+05*	1.0E+05*		--	--
Inorganics														
Antimony	DL	DL	4.0	(b)	31	31	10	10	45	820	170	DL	0.006	--
Arsenic	3.8	DL	20	(b)	6.1	6.1	38	41	(b)	38	130	DL	0.01	--
Barium	168.6	138	1000	(b)	5400	5400	1000	1000	21000	100000 (c)	30000	0.46	2	--
Beryllium	DL	1.5/DL	2.0	(b)	160	160	3.0	3.0	3200	4000	850	DL	0.004	--
Cadmium	4.9	2.6/DL	2.0	12	39	12	39	39	77	1000	210	DL	0.005	--
Chromium III			100	38	100000 (c)	38	1200	1200	100000 (c)	100000 (c)	100000 (c)		--	--
Chromium VI	25	35	100	(b)	230	230	1200	1200	2900	6100	1300	DL	0.1	--
Cobalt			20	3200	4700	3200	25	25	21000	100000 (c)	26000		--	--
Copper	50	13.1/DL	100	(b)	3100	3100	1500	1500	35000	82000	17000	DL	1.3	--
Cyanides+	1.7	DL	20	130	1600	130	20	20	840	41000	8500	0.04	0.2	--
Lead	658	14	75	(b)	400	400	400	400	500	1300	1300	DL	0.015	--
Mercury	0.55	DL	0.50	57	23	23	17	17	370	610	130	DL	0.002	--
Nickel	7.7	7.6	50	700	1600	700	420	420	4500	41000	8500	0.1	0.1	--
Selenium	DL	DL	2.0	8.1	390	8.1	36	36	100	10000	2100	DL	0.05	--
Silver	DL	0.55	2.0	110	390	110	10	10	87	10000	2100	DL	--	--
Thallium	DL	DL	2.0	2.8	6.3	2.8	10	10	12	160	30	DL	0.002	--
Vanadium			100	(b)	550	550	100	100	(b)	14000	3000		0.2	--
Zinc	275	52	100	14000	23000	14000	2800	2800	91000	1.0E+05*	1.0E+05*	DL	2	--

Prepared by: ADB 04/10/15
Checked by: RRY 04/13/15

RRS - Risk Reduction Standards
DL - Detection Limit
GW - Groundwater
NC - Not calculatable because toxicity values are not available
* If value exceeeded 100,000 mg/kg, the RRS was limited to 100,000 mg/kg
bgs - below ground surface
+ - soluble salts and complexes, n.o.s.
(a) When subsurface RRS is lower than direct contact value for surface soil, surface soil RRS defaults to subsurface RRS
(b) The calculated leaching to groundwater value is greater than the calculated value based on direct contact. Therefore, the calculated values for direct contact controls the RRS.
(c) USEPA Region 4 suggested screening levels limit maximum concentrations to 100,000 or less.
-- Not Applicable
Notes:
Delineation to upper background limits was completed for the Site as part of the EPD approved 2003 Remedial Investigation (RI) with details documented in Section 4.3 and Table 4-2 of the RI

Table 2-5
Surface Soil and Sediment Remediation Summary

Area/Parcel Number	Cleanup Criteria	Source Document	Section/Table/ Figure/Appendix
Third Level Canal	EPD Final Approved BDWP	2009 Corrective Action Closure Report and Compliance Status Report, Third Level Canal, Operable Unit 3	Section 1.3, Figure 1-1, Appendix F
Parcels 10, 93, 94, 96, 97, 100.1, 102.3, 107, 186, 188, 190, 231, 254, 365.1	Type 2 RRS	2009 Corrective Action Closure Report and Compliance Status Report, Third Level Canal, Operable Unit 3	Section 2.3, Figures 1-1A, 1-1 B
Northern Parcel (225), Car Wash Area (374.1), Georgia Power Electrical Vault	Type 5 RRS	2005 Corrective Action Closure Report and Compliance Status Report, Northern Parcel, Operable Units 1 and 2	Section 1.3, Figure 1-1, Appendices F and G
Parcels 142, 143, 144, 230, 231, 244, 330, 331, 332, 333, 334, 337, 338, 339, 349, 350, 354, 374.2, 375	Type 2 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
Parcels 185, 189, 327.1, 327.2, 328, 329	Type 2 RRS	1998 Soil Removal Completion Report for the Western, Southern and Southeastern Bituminous Parcels	Sections 2.3.2, 2.4.3, 2.5.2
Block E (Parcels 226, 227, 236, 237, 240)	Type 2 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
Parcels 53.1, 98, 162, 340, 341, 343, 362, 641, 643, 632, 764, CSX Property	Type 4 RRS	2009 Corrective Action Closure Report and Compliance Status Report, Third Level Canal, Operable Unit 3	Section 2.3, Figure 1-1A, 1-1B

Table 2-5
Surface Soil and Sediment Remediation Summary

Area/Parcel Number	Cleanup Criteria	Source Document	Section/Table/ Figure/Appendix
Fenwick and 8th Street Right of Ways	Type 4 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
King Street Right of Way	Type 4 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
8th Street Right of Way	Type 4 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
Walton Way Right of Way	Type 4 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
Taylor Street Right of Way	Type 4 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1

Table 2-5
Surface Soil and Sediment Remediation Summary

Area/Parcel Number	Cleanup Criteria	Source Document	Section/Table/ Figure/Appendix
Parcel 374.1	Type 5 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
Georgia Power Vault	Type 5 RRS	Corrective Action Closure Report and Compliance Status Report, On-Site and Off-Site Parcels, Operable Units 1 and 2	Certification of Compliance Soil Remediation, On-Site/Off-Site Parcels, OU-1 & OU-2 Figure 1
Western Parcel	Type 1 RRS	1998 Soil Removal Completion Report for the Western, Southern and Southeastern Bituminous Parcels	Table 1-1
Southern Parcel	Type 1 RRS	1998 Soil Removal Completion Report for the Western, Southern and Southeastern Bituminous Parcels	Table 1-1

Prepared by: ADB 04/24/2015
Checked by: RRY 04/28/2015

Notes:
1) Delineation to upper background limits was completed for the Site as part or the EPD approved 2003 Remedial Investigation (RI) with details documented in Section 4.3 and Table 4-2 of the RI
2) Parcel numbers are abbreviated

Table 5-1
Summary of Groundwater Concentrations

Parameter	Maximum Detected Groundwater Concentration, µg/L (a)	Target Groundwater Concentration Protective of Indoor Air, µg/L (b)	Indoor Air COPC? (c)	95% Upper Confidence Limit µg/L (d)	Basis (d)
Volatile Organic Compounds					
Benzene	31,000	19	**Yes**	8,640	95% Adjusted Gamma KM-UCL
Ethylbenzene	2,400	44	**Yes**	699	95% Adjusted Gamma KM-UCL
Toluene	17,000	27,000	No	NA	
Trichloroethylene	41	7.1	**Yes**	15.3	95% KM(t) UCL
Xylenes, total	4,600	720	**Yes**	1,410	95% Adjusted Gamma KM-UCL
Semi-Volatile Organic Compounds					
Acenaphthene	130	NT	No	NA	
Acenaphthylene	210	NT	No	NA	
Anthracene	8.9	NT	No	NA	
Benzo(a)anthracene	2.8	NV	No	NA	
Benzo(a)pyrene	2.1	NV	No	NA	
Benzo(b)fluoranthene	1.8	NV	No	NA	
Benzo(g,h,i)perylene	0.79	NV	No	NA	
Benzo(k)fluoranthene	0.68	NV	No	NA	
Chrysene	2.1	NV	No	NA	
Dibenzo(a,h)anthracene	0.31	NV	No	NA	
Fluoranthene	6.9	NV	No	NA	
Fluorene	53	NT	No	NA	
Indeno(1,2,3-cd)pyrene	0.69	NV	No	NA	
Naphthalene	10,000	64	**Yes**	4,830	95% KM (Chebyshev) UCL
Phenanthrene	53	NT	No	NA	
Pyrene	8.5	NT	No	NA	

(a) Maximum detected concentrations for the alluvium, galliard, and saprolite formations during sampling events in July 2013, July 2014, and January 2015.
(b) Calculated with residential OSWER Vapor Intrusion Screening Level (VISL) Calculator Version 1.0,May 2014 RSLs using Target Cancer Risk = 0.00001 and Target Hazard Quotient = 1 and a site-specific average groundwater temperature of 18.6 degrees Celsius (January 2015 average) (Appendix E).
(c) Compound selected as a Chemical of Potential Concern (COPC) if maximum detected concentration is greater than target groundwater concentration protective of indoor air.
(d) Calculated using ProUCL, Version 5 (Appendix E). Rounded to 3 significant figures.
µg/L = micrograms per liter.
NT = No inhalation toxicity values available for this compound.
NV = Not volatile, USEPA Regional Screening Level table (January 2015).

Prepared by: LWC 4/1/2015
Checked by: LMS 4/2/2015

Table 5-2
Residential Assumptions Used in Johnson & Ettinger Model (GW-ADV)

Parameter	Value	Justification
Average Water Temp.	18.6 ^{o}C	Site average (January 2015)
Depth Below Grade to Enclosed Space Floor	200 cm	Basement construction
Depth Below Grade to Groundwater /Thickness of Soil Stratum	247.5 cm	Site-specific (8.12 feet); average for January 2015 sampling event
Stratum A Soil Vapor Permeability	SCL	Sandy clay loam
SCS Soil Type	SCL	Sandy clay loam
Soil Dry Bulk Density	1.63 g/cm^3	Sandy clay loam – Model value
Soil Total Porosity	0.384 unitless	Sandy clay loam – Model value
Soil Water-filled Porosity	0.146 cm^3/cm^3	Sandy clay loam – Model value
Enclosed Space Floor Thickness	10 cm	Model default
Soil-Building Pressure Differential	40 g/cm-s^2	Model default
Enclosed Space Floor Length	1,000 cm	Model default (32.8 feet)
Enclosed Space Floor Width	1,000 cm	Model default (32.8 feet)
Enclosed Space Height	366 cm	Model default (12 feet)
Floor-Wall Seam Crack Width	0.1 cm	Model default
Indoor Air Exchange Rate	0.25/hour	Model default
Averaging Time, Carcinogens	70 years	HSRA default
Averaging Time, Noncarcinogens	6 years (child) and 30 years (adult)	HSRA default for adult/child residents
Exposure Duration	6 years (child) and 30 years (adult)	HSRA default for adult/child residents
Exposure Frequency	350 days/year	HSRA default for residential
Target Risk for Carcinogens	1 x 10^{-5} unitless	Cumulative Target Risk
Target Hazard for Noncarcinogens	1 unitless	Target Hazard

Prepared by: LWC 3/25/2015
Checked by: LMS 4/2/2015

Table 5-3
Calculations of Risk to Indoor Air Concentrations
Resident - Future Inhalation of Indoor Air - Vapor Intrusion

Parameter	Estimated Concentration in Air ($\mu g/m^3$)	Exposure Value Type [1]	Exposure Concentration [2]			Toxicity Values			Source	Hazard Quotient [3] (Unitless)	Mutagenic Kidney Excess Cancer Risk [4] (Unitless)	Excess Cancer Risk [5] (Unitless)	Total Excess Cancer Risk [6] (Unitless)	Target Organ
			Noncarcinogen ($\mu g/m^3$)	Mutagenic ($\mu g/m^3$)	Carcinogen ($\mu g/m^3$)	Inhalation RfC ($\mu g/m^3$)	Mutagenic Kidney Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Unit Risk $(\mu g/m^3)^{-1}$						
Volatile Organic Compounds														
Benzene	4.94E+01	Modeled - Johnson & Ettinger	5.92E+01	NA	2.03E+01	3.0E-02	NA	7.8E-06	IRIS	2.0E+00	NA	1.6E-04	1.6E-04	Blood
Ethylbenzene	4.72E+00	Modeled - Johnson & Ettinger	5.66E+00	NA	1.94E+00	1.0E+00	NA	2.5E-06	IRIS/Cal EPA	5.7E-03	NA	4.8E-06	4.8E-06	Developmental Toxicity
Naphthalene	2.34E+00	Modeled - Johnson & Ettinger	2.80E+00	NA	9.62E-01	3.0E-03	NA	3.4E-05	IRIS/Cal EPA	9.3E-01	NA	3.3E-05	3.3E-05	Nasal effects
Trichloroethylene	1.36E-01	Modeled - Johnson & Ettinger	1.63E-01	1.42E-01	5.59E-02	2.0E-03	1.0E-06	3.1E-06	IRIS	8.2E-02	1.4E-07	1.7E-07	3.1E-07	Thymus, cardiac
Xylenes, total	6.93E+00	Modeled - Johnson & Ettinger	8.31E+00	NA	2.85E+00	1.0E-01	NA	NA	IRIS	8.3E-02	NA	NA	NA	Impaired Motor Coordination
									Total:	3E+00	1E-07	2E-04	2E-04	

m^3 = cubic meters
mg = milligram
RfC = Reference Concentration
µg = micrograms
IRIS - Integrated Risk Information System; Cal EPA - California Environmental Protection Agency
[1] Calculated using Johnson & Ettinger Spreadsheet (GW-ADV) and site-specific exposures. 95 percent Upper Confidence Limit (UCL) groundwater concentration used as the exposure point concentration (Appendix E).
[2] Exposure Concentration = See Equations below
[3] Hazard Quotient (Noncarcinogens) = Noncarcinogen Exposure Concentration/RfC x 1000 µg/mg
[4] Mutagenic Kidney Excess Cancer Risk = Mutagenic Exposure Concentration x Mutagenic Kidney Inhalation Unit Risk
[5] Excess Cancer Risk = Carcinogenic Exposure Concentration x Inhalation Unit Risk
[6] Total Excess Cancer Risk = Mutagenic Kidney Excess Cancer Risk + Non-Mutagenic Excess Cancer Risk

Prepared by: LWC 4/1/15
Checked by: LMS 4/2/15

Carcinogen Exposure Concentration = $CA \times ET \times EF \times ED / AT_c$ where: Noncarcinogen Exposure Concentration = $CA \times ET \times EF \times ED / AT_{nc}$ where:
Mutagenic Exposure Concentration = $CA \times ET \times EF \times ((ED2 \times AF2)+(ED4 \times AF4)+(ED10 \times AF10)+(ED14 \times AF\ 14)) / ATc$ where:

CA = Constituent Concentration in Air (estimated)	See above	(ug/m^3)	AT_{nc} = Averaging Time (Noncarcinogen, hours)	210,240
ET = Exposure Time (hours per day)	24	(hours/day)	AT_c = Averaging Time (Carcinogenic, hours)	613,200
EF = Exposure Frequency (days per year)	350	(days/year)		
ED = Exposure Duration (years)	30	(years)		
ED2 = Exposure Duration 2 (mutagen)	2	(years)		
ED4 = Exposure Duration 4 (mutagen)	4	(years)		
ED10 = Exposure Duration 10 (mutagen)	10	(years)		
ED14 = Exposure Duration ≥14 (mutagen)	16	(years)		
AF2 = Age-Dependent Adjustment Factor	10			
AF4 = Age-Dependent Adjustment Factor	3			
AF10 = Age-Dependent Adjustment Factor	3			
AF14 = Age-Dependent Adjustment Factor	1			

Table 5-4
Summary of Groundwater Remediation Goals Protective of Indoor Air Exposures

Receptor	Parameter	Target Organ	Concentration	Goal for Groundwater Concentration (HI=1), µg/L	Goal for Groundwater Concentration (TR=3.3 x 10^{-6}), µg/L
Onsite Residential Adult	Benzene	Blood	8,640	4,380	**180**
	Ethylbenzene	Developmental Toxicity	699	124,000	**476**
	Naphthalene	Nasal Effects	4,830	5,170	**487**

Note: Target Risk (TR) set at 3.3 x 10^{-6} so that the cumulative cancer risk equals 1 x 10^{-5}. Hazard index (HI) set at 1 because different target organs are affected. (Appendix E)

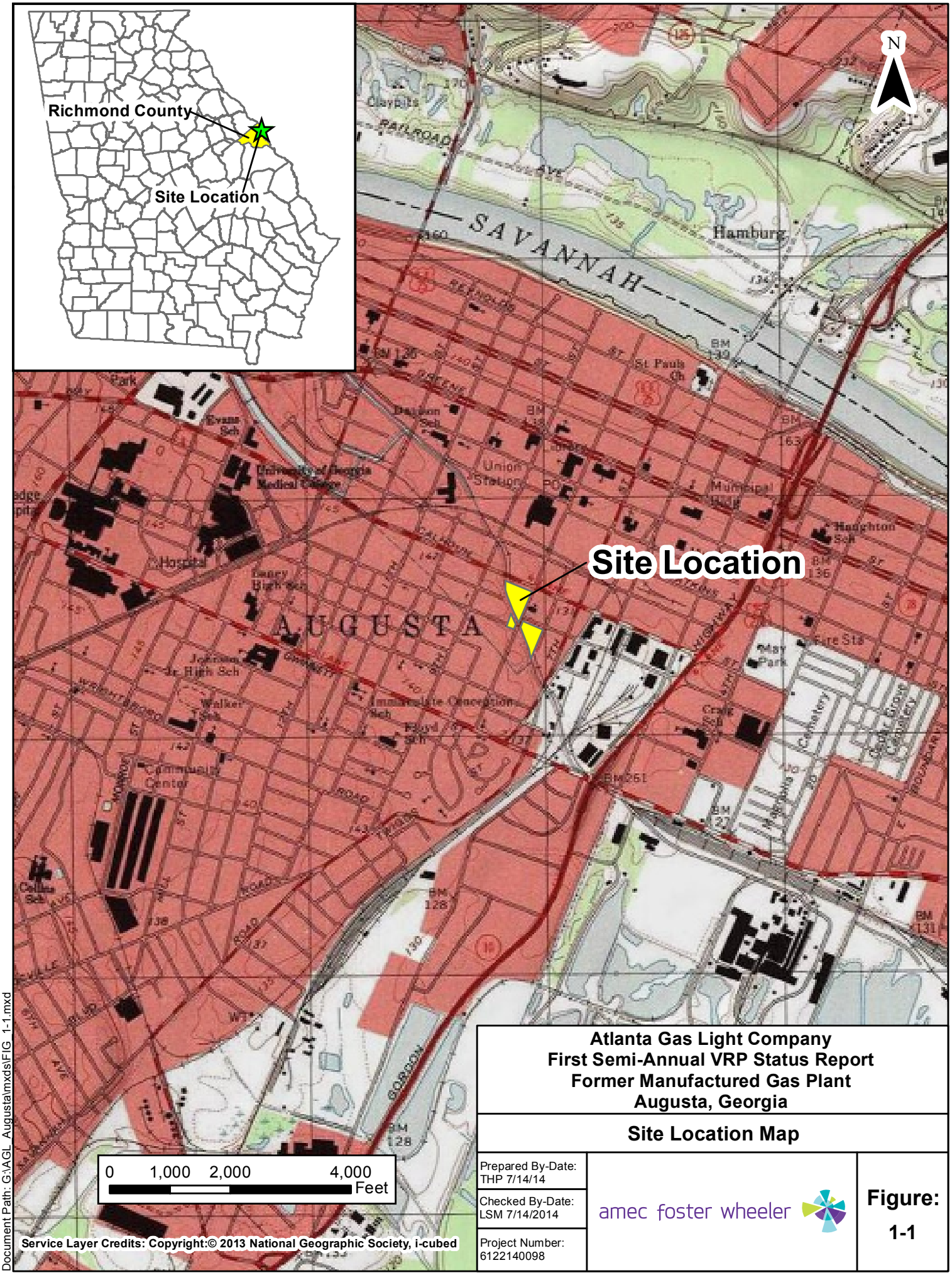
Goal for Groundwater (HI) = Groundwater Exposure Point Concentration - UCL (Table 5-1) / Chemical-specific Hazard Quotient (Table 5-3).

Goal for Groundwater (TR=3.3 x 10^{-6}) = (Groundwater Exposure Point Concentration - UCL (Table 5-1) x 3.3 x 10^{6}) / Chemical-specific Risk (Table 5-3).

Bold font indicates the selected groundwater remediation goals protective of residential indoor air exposures.

Prepared by: LMS 4/2/15
Checked by: LWC 4/6/15

FIGURES

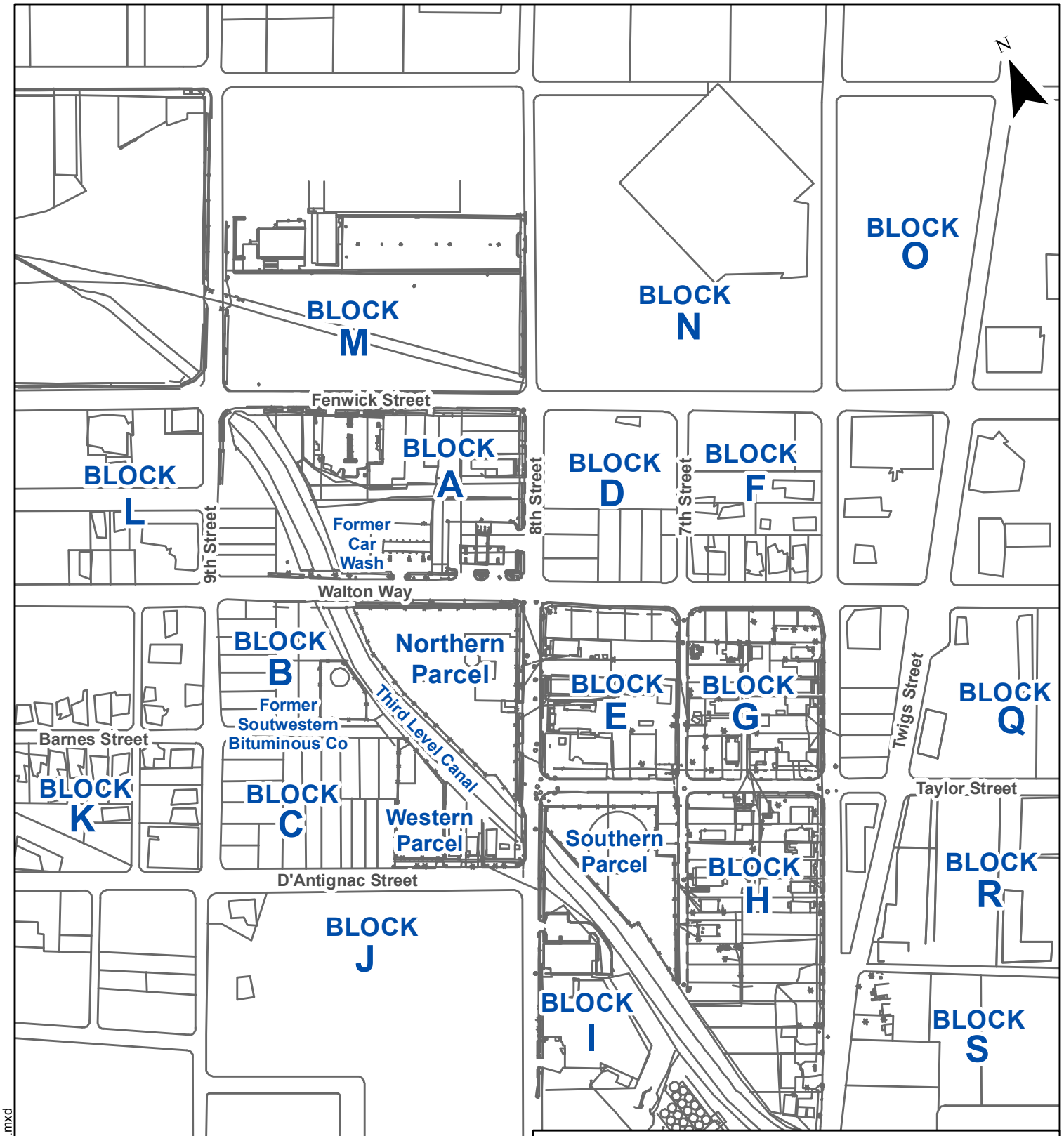


Document Path: G:\AGL_Augusta\mxds\FIG_1-1.mxd

Atlanta Gas Light Company
First Semi-Annual VRP Status Report
Former Manufactured Gas Plant
Augusta, Georgia

Site Location Map

Prepared By-Date: THP 7/14/14	amec foster wheeler	**Figure: 1-1**
Checked By-Date: LSM 7/14/2014		
Project Number: 6122140098		



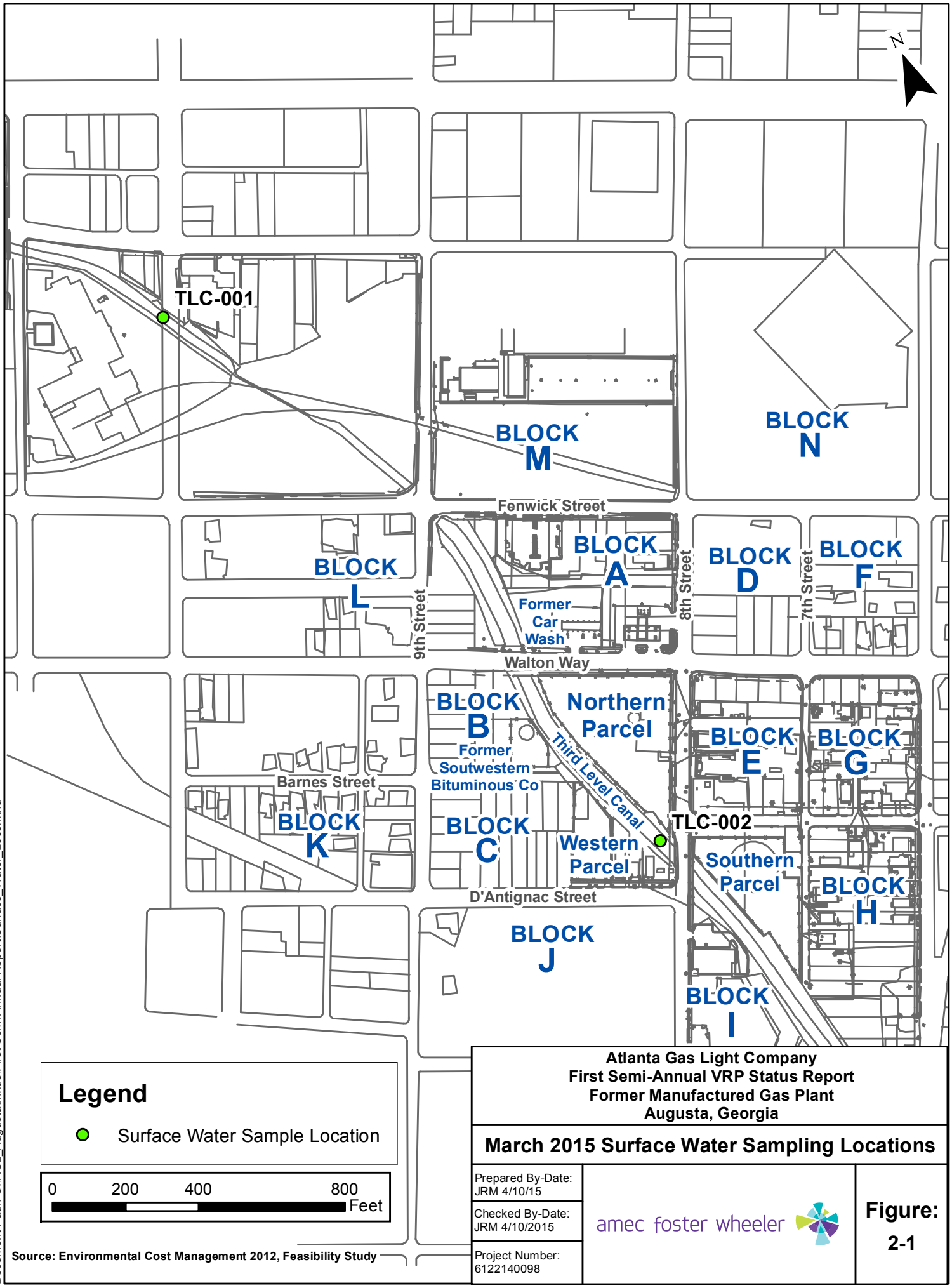
Source: Environmental Cost Management 2012, Feasibility Study

Atlanta Gas Light Company
First Semi-Annual VRP Status Report
Former Manufactured Gas Plant
Augusta, Georgia

Parcel Block Map-City of Augusta

Prepared By-Date: THP 7/14/14	amec foster wheeler	**Figure: 1-2**
Checked By-Date: LSM 7/14/2014		
Project Number: 6122140098		

Document Path: G:\AGL_Augusta\mxds\FIG_1-2.mxd


N
TLC-001
BLOCK M
BLOCK N
Fenwick Street
BLOCK L
BLOCK A
BLOCK D
BLOCK F
9th Street
8th Street
7th Street
Former Car Wash
Walton Way
BLOCK B
Northern Parcel
Third Level Canal
Former Soutwestern Bituminous Co
BLOCK E
BLOCK G
Barnes Street
BLOCK K
BLOCK C
Western Parcel
TLC-002
Southern Parcel
BLOCK H
D'Antignac Street
BLOCK J
BLOCK I
Legend
Surface Water Sample Location
0 200 400 800
Feet
Source: Environmental Cost Management 2012, Feasibility Study
Atlanta Gas Light Company
First Semi-Annual VRP Status Report
Former Manufactured Gas Plant
Augusta, Georgia
March 2015 Surface Water Sampling Locations
Prepared By-Date: JRM 4/10/15
Checked By-Date: JRM 4/10/2015
Project Number: 6122140098
amec foster wheeler
Figure: 2-1
Document Path: G:\AGL_Augusta\mxds\First Semi Annual Report\Surface_Water_Locs.mxd

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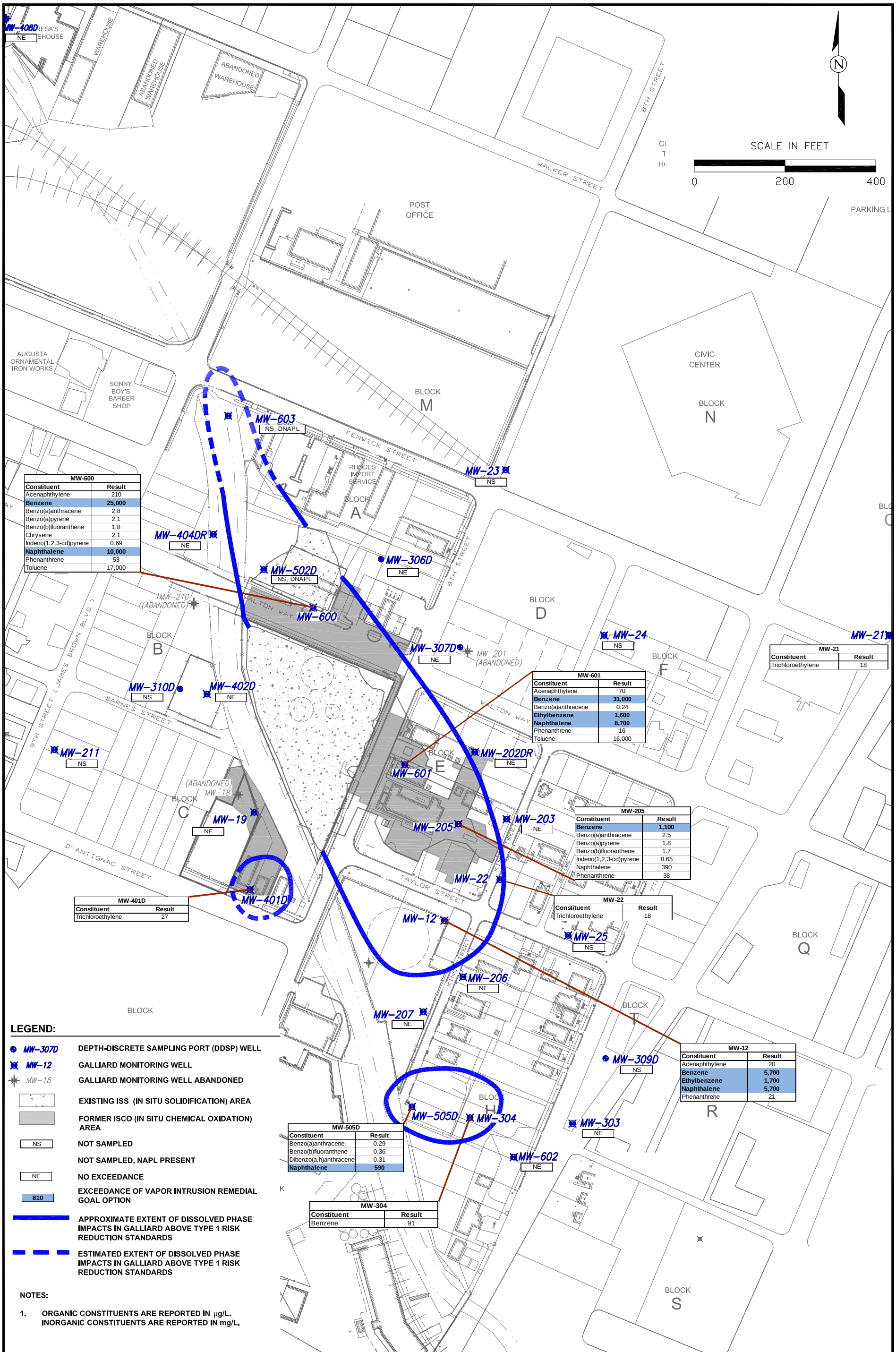

MW-600	
Constituent	**Result**
Acenaphthylene	210
Benzene	**25,000**
Benzo(a)anthracene	2.8
Benzo(a)pyrene	2.1
Benzo(b)fluoranthene	1.8
Chrysene	2.1
Indeno(1,2,3-cd)pyrene	0.69
Naphthalene	**10,000**
Phenanthrene	53
Toluene	17,000

MW-601	
Constituent	**Result**
Acenaphthylene	70
Benzene	**31,000**
Benzo(a)anthracene	0.24
Ethylbenzene	**1,600**
Naphthalene	**8,700**
Phenanthrene	16
Toluene	16,000

MW-21	
Constituent	**Result**
Trichloroethylene	18

MW-205	
Constituent	**Result**
Benzene	**1,100**
Benzo(a)anthracene	2.5
Benzo(a)pyrene	1.8
Benzo(b)fluoranthene	1.7
Indeno(1,2,3-cd)pyrene	0.65
Naphthalene	390
Phenanthrene	38

MW-22	
Constituent	**Result**
Trichloroethylene	18

MW-401D	
Constituent	**Result**
Trichloroethylene	27

MW-12	
Constituent	**Result**
Acenaphthylene	20
Benzene	**5,700**
Ethylbenzene	**1,700**
Naphthalene	**5,700**
Phenanthrene	21

MW-505D	
Constituent	**Result**
Benzo(a)anthracene	0.29
Benzo(b)fluoranthene	0.36
Dibenzo(a,h)anthracene	0.31
Naphthalene	**590**

MW-304	
Constituent	**Result**
Benzene	91

LEGEND:

- MW-307D — DEPTH-DISCRETE SAMPLING PORT (DDSP) WELL
- MW-12 — GALLIARD MONITORING WELL
- MW-18 — GALLIARD MONITORING WELL ABANDONED
- EXISTING ISS (IN SITU SOLIDIFICATION) AREA
- FORMER ISCO (IN SITU CHEMICAL OXIDATION) AREA
- NS — NOT SAMPLED
- NOT SAMPLED, NAPL PRESENT
- NE — NO EXCEEDANCE
- 810 — EXCEEDANCE OF VAPOR INTRUSION REMEDIAL GOAL OPTION
- APPROXIMATE EXTENT OF DISSOLVED PHASE IMPACTS IN GALLIARD ABOVE TYPE 1 RISK REDUCTION STANDARDS
- ESTIMATED EXTENT OF DISSOLVED PHASE IMPACTS IN GALLIARD ABOVE TYPE 1 RISK REDUCTION STANDARDS

NOTES:

1. ORGANIC CONSTITUENTS ARE REPORTED IN µg/L. INORGANIC CONSTITUENTS ARE REPORTED IN mg/L.

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AUGUSTA, GEORGIA

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GALLIARD GROUNDWATER APPROXIMATE EXTENT OF DISSOLVED PHASE IMPACTS JULY 2014

JOB NO 6122-14-0098 FIGURE 2-2

PREPARED BY/DATE _____ CHECKED BY/DATE _____

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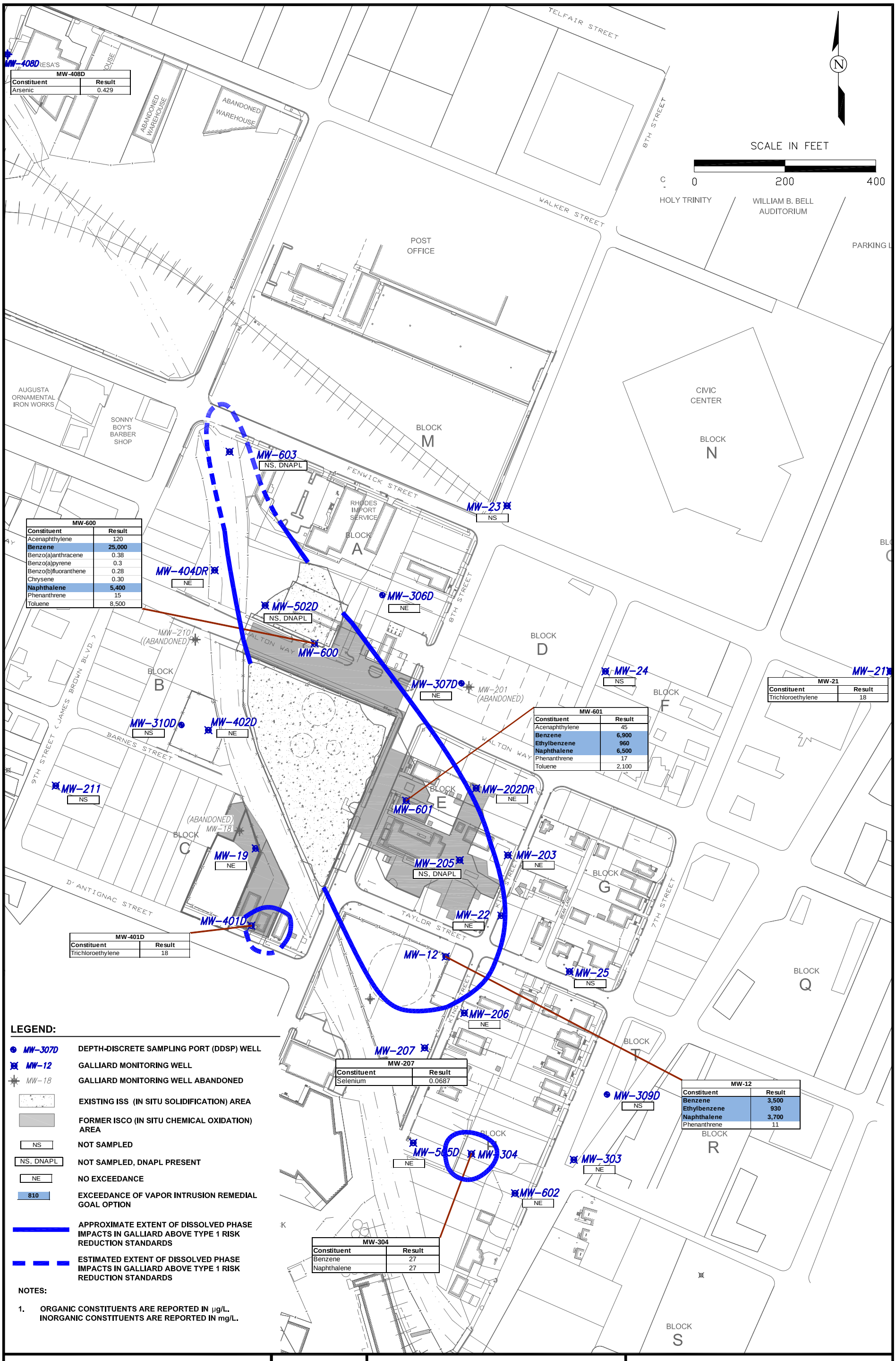

LEGEND:

- MW-307D — DEPTH-DISCRETE SAMPLING PORT (DDSP) WELL
- MW-12 — GALLIARD MONITORING WELL
- MW-18 — GALLIARD MONITORING WELL ABANDONED
- EXISTING ISS (IN SITU SOLIDIFICATION) AREA
- FORMER ISCO (IN SITU CHEMICAL OXIDATION) AREA
- NS — NOT SAMPLED
- NS, DNAPL — NOT SAMPLED, DNAPL PRESENT
- NE — NO EXCEEDANCE
- 810 — EXCEEDANCE OF VAPOR INTRUSION REMEDIAL GOAL OPTION
- APPROXIMATE EXTENT OF DISSOLVED PHASE IMPACTS IN GALLIARD ABOVE TYPE 1 RISK REDUCTION STANDARDS
- ESTIMATED EXTENT OF DISSOLVED PHASE IMPACTS IN GALLIARD ABOVE TYPE 1 RISK REDUCTION STANDARDS

NOTES:

1. ORGANIC CONSTITUENTS ARE REPORTED IN µg/L. INORGANIC CONSTITUENTS ARE REPORTED IN mg/L.

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GALLIARD GROUNDWATER APPROXIMATE EXTENT OF DISSOLVED PHASE IMPACTS JANUARY 2015

JOB NO 6122-14-0098 FIGURE 2-3

PREPARED BY/DATE _____ CHECKED BY/DATE _____

LEGEND:

- MW-315 — BEDROCK MONITORING WELL
- MW-308BR — BEDROCK RECOVERY WELL
- APPROXIMATE EXTENT OF DISSOLVED PHASE IMPACTS IN BEDROCK ABOVE TYPE 1 RISK REDUCTION STANDARD FOR SITE
- EXISTING ISS (IN SITU SOLIDIFICATION) AREA
- FORMER ISCO (IN SITU CHEMICAL OXIDATION) AREA
- NS* — DESTROYED BY CITY
- NS — NOT SAMPLED
- NE — NO EXCEEDANCE

NOTES:

1. ORGANIC CONSTITUENTS ARE REPORTED IN µg/L. INORGANIC CONSTITUENTS ARE REPORTED IN mg/L.

SCALE IN FEET
0 200 400

MW-318	
Constituent	Result
Benzene	1,700
Naphthalene	730

MW-306BR	
Constituent	Result
Benzene	300
Naphthalene	210

MW-512BR	
Constituent	Result
Benzene	12

MW-511BR	
Constituent	Result
Benzene	670

MW-503BR	
Constituent	Result
Benzene	910

MW-504BR	
Constituent	Result
Benzene	570

MW-510BR	
Constituent	Result
Benzene	25
Benzo(a)anthracene	0.11

MW-509BR	
Constituent	Result
Benzene	7,400
Ethylbenzene	910
Naphthalene	290

MW-213	
Constituent	Result
Benzene	950
Ethylbenzene	110

MW-307BR	
Constituent	Result
Benzene	15,000
Benzo(a)anthracene	0.19
Ethylbenzene	2,400
Naphthalene	7,700
Phenanthrene	55

MW-308BR	
Constituent	Result
Anthracene	36
Benzene	6,400
Benzo(a)anthracene	28
Benzo(a)pyrene	22
Benzo(b)fluoranthene	22
Benzo(g,h,i)perylene	11
Chrysene	26
Dibenzo(a,h)anthracene	2.4
Indeno(1,2,3-cd)pyrene	8.9
Naphthalene	5,600
Phenanthrene	180

MW-500BR	
Constituent	Result
Benzene	9,300
Naphthalene	770

MW-319 NE; MW-320 NE; MW-325 NE; MW-513BR NE; MW-323 NE; MW-324 NE; MW-321 NE; MW-316 NS; MW-322 NE; MW-313 NE; MW-508BR NE; MW-309BR NE; MW-310BR NE; MW-315 NE; MW-506BR NS*; MW-507BR NE

TELFAIR STREET; WALKER STREET; 8TH STREET; FENWICK STREET; D' ANTIGNAC STREET; KING STREET; BEAN LANE; 6TH STREET; 7TH STREET; WALTON WAY; BARTON WAY; JAMES BROWN BLVD.

CHURCH OF THE MOST HOLY TRINITY; WILLIAM B. BELL AUDITORIUM; PARKING LOT; POST OFFICE; CIVIC CENTER; SONNY BOY'S BARBER SHOP; RHODES IMPORT SERVICE

BLOCK A; BLOCK C; BLOCK D; BLOCK E; BLOCK F; BLOCK G; BLOCK H; BLOCK I; BLOCK J; BLOCK L; BLOCK M; BLOCK N; BLOCK O; BLOCK P; BLOCK R; BLOCK T

MW-18 (ABANDONED); MW-201 (ABANDONED)

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BEDROCK GROUNDWATER
APPROXIMATE EXTENT OF
DISSOLVED PHASE IMPACTS
JULY 2014

JOB NO 6122-14-0098 FIGURE 2-4

PREPARED BY/DATE _____ CHECKED BY/DATE _____

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LEGEND:

- MW-315 — BEDROCK MONITORING WELL
- MW-308BR — BEDROCK RECOVERY WELL
- APPROXIMATE EXTENT OF DISSOLVED PHASE IMPACTS IN BEDROCK ABOVE RISK REDUCTION STANDARD FOR TYPE 1
- EXISTING ISS (IN SITU SOLIDIFICATION) AREA
- FORMER ISCO (IN SITU CHEMICAL OXIDATION) AREA
- NS* — DESTROYED BY CITY
- NS — NOT SAMPLED
- NE — NO EXCEEDANCE

NOTES:

1. ORGANIC CONSTITUENTS ARE REPORTED IN µg/L. INORGANIC CONSTITUENTS ARE REPORTED IN mg/L.

SCALE IN FEET

0 200 400

MW-318	
Constituent	Result
Benzene	1,400
Naphthalene	920

MW-325	
Constituent	Result
Cadmium	0.0090

MW-511BR	
Constituent	Result
Benzene	450
Naphthalene	150

MW-503BR	
Constituent	Result
Benzene	35

MW-510BR	
Constituent	Result
Benzene	1,100
Benzo(a)anthracene	0.17
Naphthalene	300

MW-509BR	
Constituent	Result
Benzene	2,500
Naphthalene	810

MW-213	
Constituent	Result
Acenaphthylene	180
Benzene	8,900
Ethylbenzene	1,500
Naphthalene	14,000
Phenanthrene	52

MW-307BR	
Constituent	Result
Benzene	12,000
Benzo(a)anthracene	0.20
Ethylbenzene	2,000
Naphthalene	6,700
Phenanthrene	46

MW-308BR	
Constituent	Result
Acenaphthylene	66
Benzene	6,600
Benzo(a)anthracene	9.6
Benzo(a)pyrene	11
Benzo(b)fluoranthene	10
Chrysene	7.8
Dibenzo(a,h)anthracene	1.1
Ethylbenzene	810
Indeno(1,2,3-cd)pyrene	4.8
Naphthalene	3,400
Phenanthrene	28
Toluene	2,100

MW-500BR	
Constituent	Result
Benzene	13,000
Ethylbenzene	1,200
Naphthalene	2,800
Phenanthrene	12

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BEDROCK GROUNDWATER
APPROXIMATE EXTENT OF
DISSOLVED PHASE IMPACTS
JANUARY 2015

JOB NO 6122-14-0098 FIGURE 2-5

PREPARED BY/DATE _____ CHECKED BY/DATE _____

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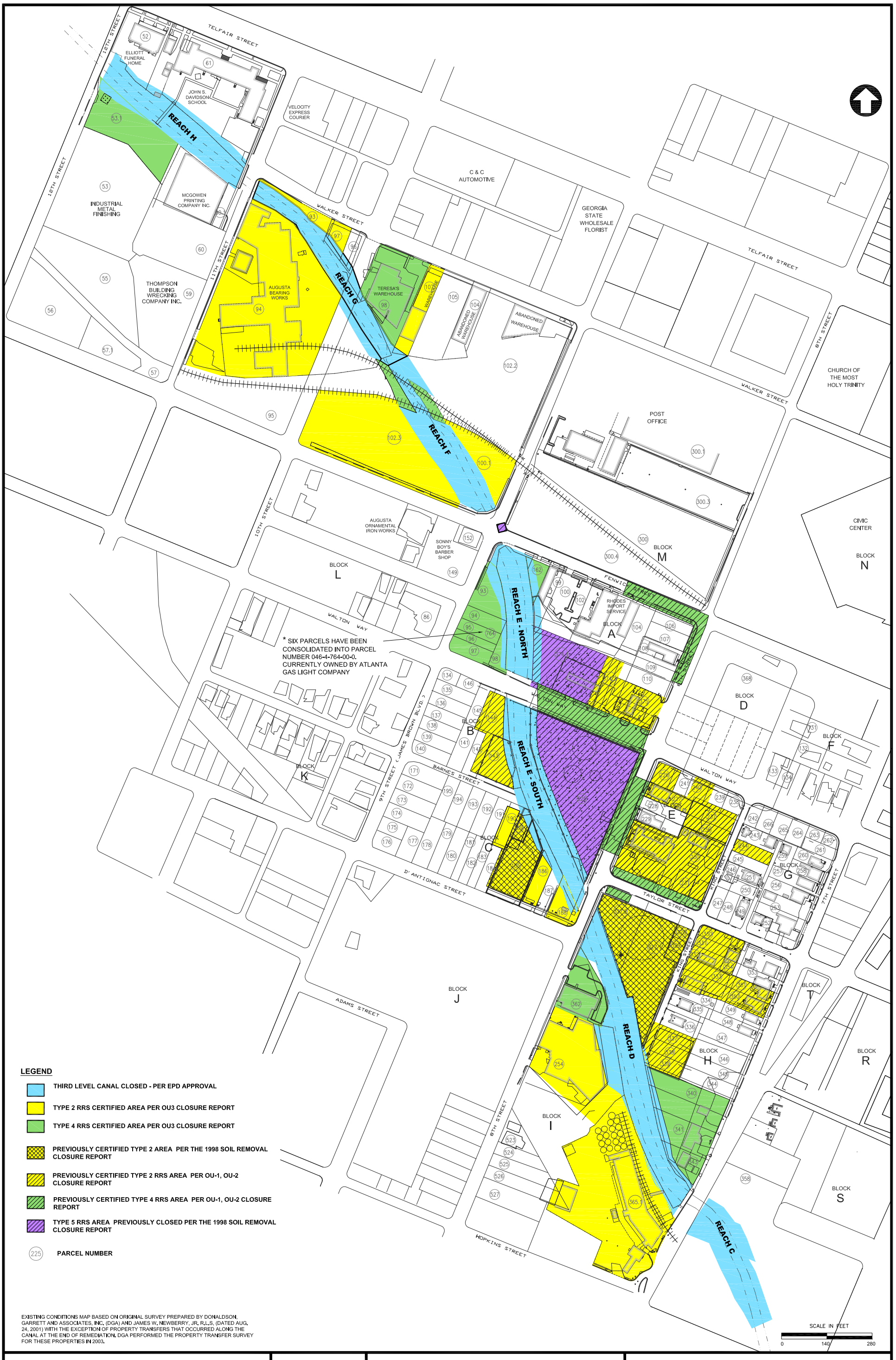

LEGEND

- THIRD LEVEL CANAL CLOSED - PER EPD APPROVAL
- TYPE 2 RRS CERTIFIED AREA PER OU3 CLOSURE REPORT
- TYPE 4 RRS CERTIFIED AREA PER OU3 CLOSURE REPORT
- PREVIOUSLY CERTIFIED TYPE 2 AREA PER THE 1998 SOIL REMOVAL CLOSURE REPORT
- PREVIOUSLY CERTIFIED TYPE 2 RRS AREA PER OU-1, OU-2 CLOSURE REPORT
- PREVIOUSLY CERTIFIED TYPE 4 RRS AREA PER OU-1, OU-2 CLOSURE REPORT
- TYPE 5 RRS AREA PREVIOUSLY CLOSED PER THE 1998 SOIL REMOVAL CLOSURE REPORT
- (225) PARCEL NUMBER

EXISTING CONDITIONS MAP BASED ON ORIGINAL SURVEY PREPARED BY DONALDSON, GARRETT AND ASSOCIATES, INC. (DGA) AND JAMES W. NEWBERRY, JR, R.L.S, (DATED AUG. 24, 2001) WITH THE EXCEPTION OF PROPERTY TRANSFERS THAT OCCURRED ALONG THE CANAL AT THE END OF REMEDIATION. DGA PERFORMED THE PROPERTY TRANSFER SURVEY FOR THESE PROPERTIES IN 2003.

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AUGUSTA, GEORGIA

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SITE MAP REGULATORY STATUS
FOR SOIL/ UNSATURATED ZONE

JOB NO. 6122–14–0098 FIGURE 2–6

PREPARED BY/DATE _____ CHECKED BY/DATE _____

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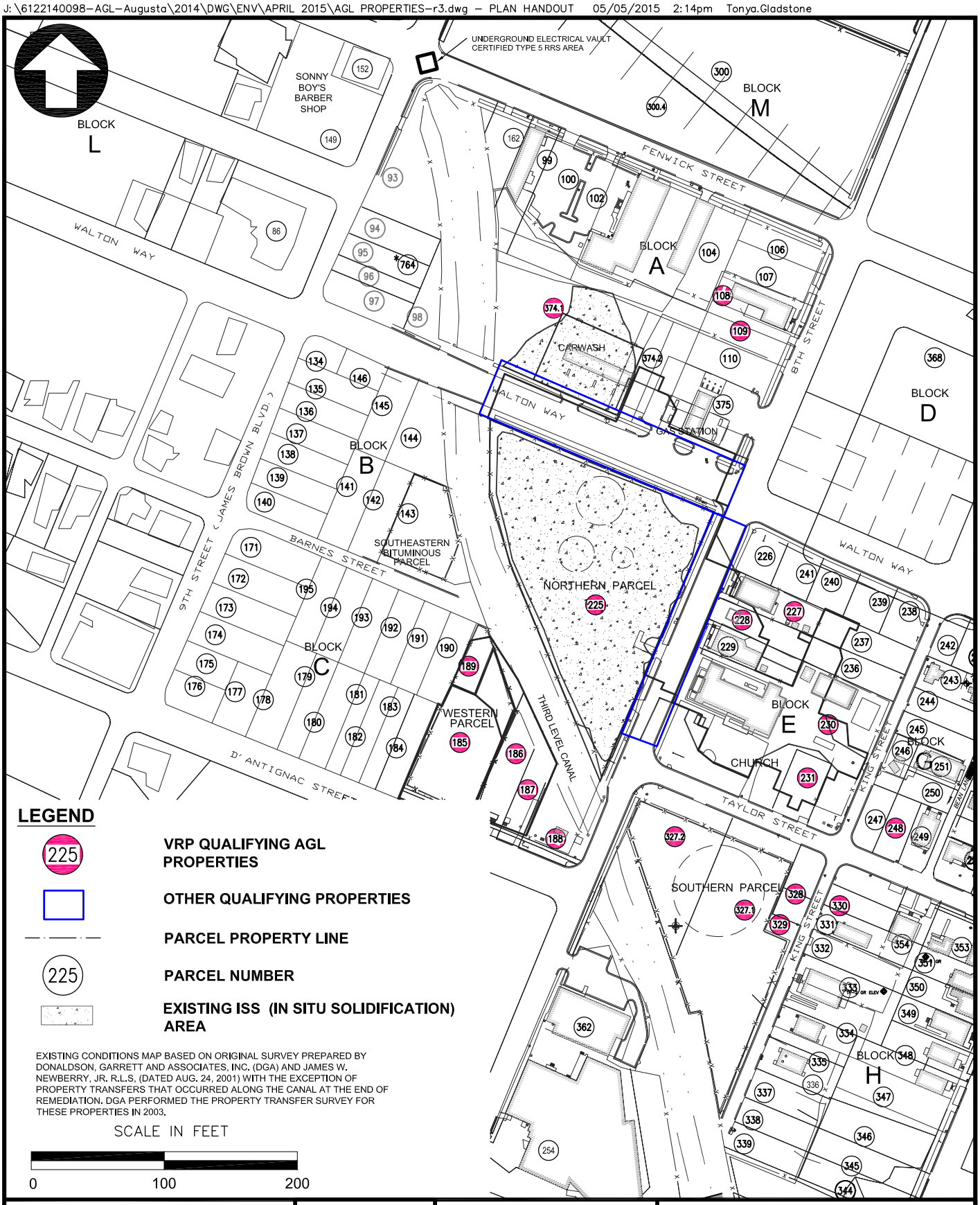

LEGEND

- 225 — VRP QUALIFYING AGL PROPERTIES
- OTHER QUALIFYING PROPERTIES
- PARCEL PROPERTY LINE
- 225 — PARCEL NUMBER
- EXISTING ISS (IN SITU SOLIDIFICATION) AREA

EXISTING CONDITIONS MAP BASED ON ORIGINAL SURVEY PREPARED BY DONALDSON, GARRETT AND ASSOCIATES, INC. (DGA) AND JAMES W. NEWBERRY, JR. R.L.S. (DATED AUG. 24, 2001) WITH THE EXCEPTION OF PROPERTY TRANSFERS THAT OCCURRED ALONG THE CANAL AT THE END OF REMEDIATION. DGA PERFORMED THE PROPERTY TRANSFER SURVEY FOR THESE PROPERTIES IN 2003.

SCALE IN FEET

0 100 200

ATLANTA GAS LIGHT COMPANY
FIRST SEMI-ANNUAL
VRP STATUS REPORT, FORMER
MANUFACTURED GAS PLANT
AUGUSTA, GEORGIA

amec foster wheeler

Amec Foster Wheeler
Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD, NW, SUITE 100
KENNESAW, GEORGIA 30144
(770) 421-3400

QUALIFYING PROPERTIES

JOB NO. 6122-14-0098 FIGURE: 3-1

PREPARED BY/DATE

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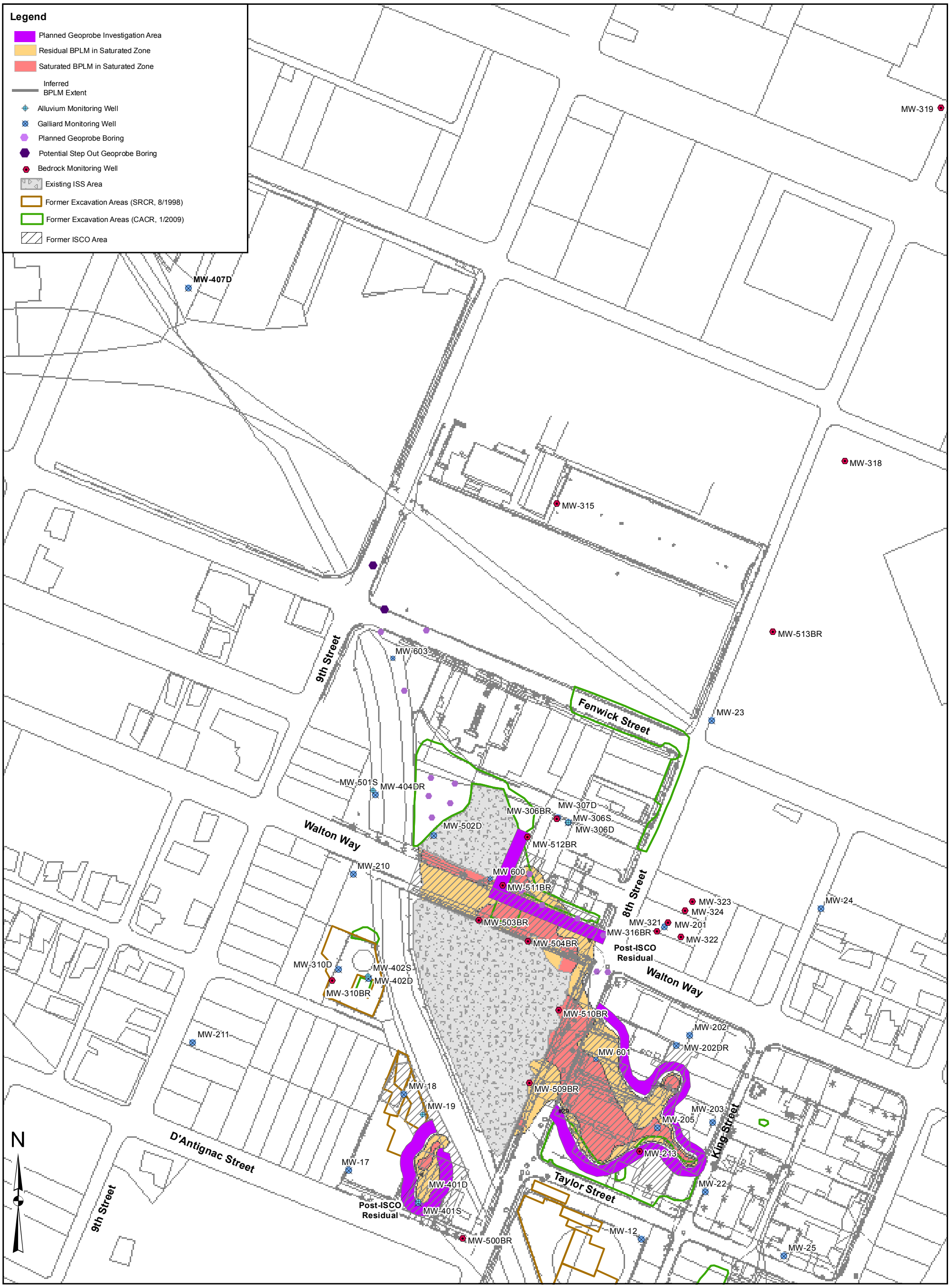

Notes:

BPLM extent revised based on results of data-gap investigation and installation of additional Galliard wells.

BPLM extent based on visual BPLM observations (before remediation) during boring and drilling; adjusted with the removal of BPLM in areas of In-Situ Solidification (ISS) and excavation; and comparison to 3d BPLM source model.

Extent shown conservatively assumes that observed BPLM were not reduced by ISCO.

Excavation areas for offsite properties from Corrective Action Closure Report (CACR), MACTEC, 1/16/2009.

100 50 0 100 Feet

Atlanta Gas Light Company
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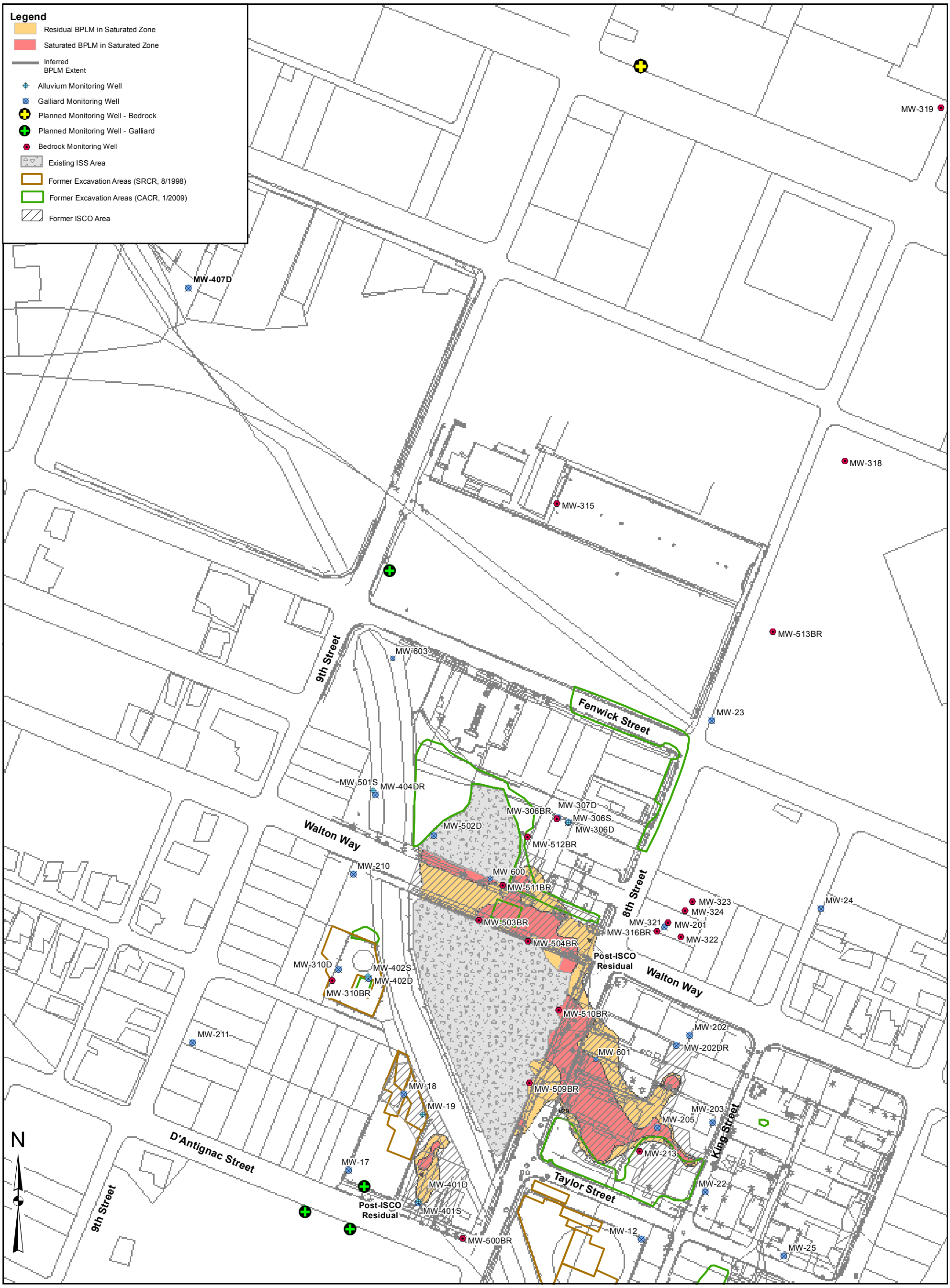
Former Manufactured Gas Plant
Augusta, Georgia

Planned Additional Geoprobe Investigation Areas

Prepared By-Date: Tg 1/19/15	amec foster wheeler	**Figure: 4-1**
Checked By-Date: LSM 1/19/2015		
Project Number: 6122140098		



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Excavation areas for offsite properties from Corrective Action Closure Report (CACR), MACTEC, 1/16/2009.

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First Semi-Annual VRP Status Report
Former Manufactured Gas Plant
Augusta, Georgia

Planned Monitoring Well Locations

Prepared By-Date: Tg 1/19/15	amec foster wheeler	**Figure: 4-2**
Checked By-Date: LSM 1/19/2015		
Project Number: 6122140098		

APPENDIX A

RESPONSES TO EPD'S DECEMBER 3, 2014 COMMENT LETTER

APPENDIX B

JANUARY 2015 CAER

(SUBMITTED UNDER SEPARATE COVER)

APPENDIX C

CLOSURE APPROVAL LETTERS

APPENDIX D

MARCH 2015 SURFACE WATER ANALYTICAL DATA

APPENDIX E

PARCEL AFFIDAVITS AND CITY OF AUGUSTA LETTER

APPENDIX F

VAPOR INTRUSION

ATTACHMENT A

ATTACHMENT B

ATTACHMENT C

APPENDIX G

REGISTERED PROFESSIONAL SUPPORTING DOCUMENTATION

Response to EPD's December 3, 2014 Comment Letter on the Augusta MGP Site Voluntary Investigation and Remediation Plan Application dated August 2014

Conceptual Site Model

1) No surface water data has been presented within the VRP Application to support or demonstrate the elimination of the noted 3rd Level Canal as a surface water exposure pathway. Please include a description of the surface water exposure pathway, including current surface water data, a more detailed description of the past corrective actions completed in the 3rd Level Canal, and a rationale for why the Canal should or should not be considered a complete pathway.

AGLC Response: *Language has been included in Section 2.2 of the First Semi-Annual Status Report to describe the surface water exposure pathway, past corrective actions completed in the 3rd Level Canal, and rationale for why the Canal should not be considered a complete pathway. Additionally, to evaluate current conditions in the 3rd Level Canal, two surface water samples were collected, one north of the Site and one south of the Site, on March 17, 2015 as shown on Figure 2-1 of the Status Report. Results for this recent surface water sampling are presented on Table 2-1 and discussed in Section 2.2.*

2) Considering that the in-situ stabilization (ISS) corrective action will be implemented to not only address source material, but to also address groundwater quality issues, groundwater cleanup criteria/goals should be developed prior to the implementation of the ISS corrective action. In particular, pre- and post-ISS groundwater evaluations should be developed and implemented to assess the degree of influence the ISS remedy will have on the groundwater quality at the site. Please note that this may require the installation of additional groundwater monitoring well locations to supplement the conceptual site model and contribute to the characterization of the dissolved phase groundwater plume.

AGLC Response: *As discussed in the VIRP, it is planned that qualifying parcels will have groundwater use restrictions eliminating the ingestion and dermal exposure pathways to groundwater. With these use restrictions in place, vapor intrusion (VI) from groundwater to indoor air will be the driving exposure pathway for potential residual impacts in the upper aquifer post ISS. An updated VI risk assessment has been completed using the most recent sampling data to represent current conditions. The risk assessment is included as Appendix E of the Status Report with a summary included in Section 5.0. A summary of the groundwater remediation goals protective of indoor air exposures is included in Tables 2-4 and 5-4.*

Groundwater will continue to be sampled semi-annually consistent with the current program until construction is initiated. Some wells in the remedial footprint will need to be abandoned due to the construction activities. A modified program with a subset of existing wells will be sampled during ISS implementation to continue to evaluate groundwater quality. After implementation of ISS is complete, groundwater flow in the upper aquifer will be altered by the solidified mass. Additionally, permeability and leaching potential will be greatly reduced within the ISS footprint. For these reasons, locations of potential new/replacement wells will be identified after completion of construction activities and after an evaluation of Post ISS groundwater data from the

subset of retained wells has been completed. It should be noted that AGLC does intend to install wells prior to construction as described in Section 4.4 of the Status Report to evaluate TCE impacts in Block C and support the delineation requirements identified in Comment 5.

Groundwater data collected in July 2014 and January 2015 have been added to the groundwater summary table presented in the VIRP and are included in the Status Report as Tables 2-2 and 2-3. The January 2015 semi-annual sampling report is included as Appendix C of the status report.

3) In support of addressing the delineation requirements included in Section 12-8-1-8 of the Act, please revise Table 1 to indicate the site specific delineation criteria and cleanup standards that were used or will be used for each of the established site-specific constituents of interest at the site as they are applied to each applicable exposure pathway (soils, sediment, groundwater, surface water, vapor intrusion).

AGLC Response*: Table 1 from the VIRP has been revised to include site specific delineation criteria and cleanup standards used for the established site-specific constituents of interest (COI) for soil, groundwater, and vapor intrusion pathways and is included as Table 2-4 of the Status Report. Soils/sediment in the Canal were remediated to the standards agreed upon between AGLC and EPD in the Basis of Design Work Plan (BDWP) and as documented in the approved OU-3 Corrective Action Closure Report. Additionally, the surface water exposure pathway is addressed in the response to Comment 1 and Section 2.2 of the Status Report.*

4) Section 3.4.2.1, Surface Soil and Sediments Ingestion and Contact, of the VRP Application indicated that AGLC has remediated this exposure pathway as described in Section 2.3 of the Application. However, Section 2.3 does not include definitive information to demonstrate that this exposure pathway has been remediated and eliminated. Additional information will be needed to demonstrate that the elimination of this exposure pathway including but not limited to the following:

   a. Indication of the delineation criteria and cleanup standards that were used to demonstrate compliance.
   b. Include copies of the formal letters from EPD approving the referenced criteria, cleanup standards, and associated compliance certification.
   c. Provide a reference to any applicable figure(s) and data table(s) that were used from previous report submittals to demonstrate compliance, or provide them as part of the supplemental supporting documentation to the VIRP.

AGLC Response: *Indication of delineation criteria and cleanup standards used to demonstrate compliance are located in Table 2-4 for the Surface Soil exposure pathway. As discussed in the response to Comment 3, soils/sediment in the Canal were remediated to the standards agreed upon between AGLC and EPD in the Basis of Design Work Plan (BDWP) and as documented in the approved OU-3 Corrective Action Closure Report. Copies of approval letters from EPD and compliance certification are included in Appendix A. Table 2-5 shows in which documents the standards/criteria for surface soil and sediments ingestion and contact can be found.*

5) Based on the groundwater data and associated file information for the site, additional groundwater data will be required at the following locations, in addition to those proposed within the VRP Application, in order to complete delineation requirements in accordance with Section 12-8-1-8 of the Act:

   a. Section 3.3.1 of the VRP Application indicated that the extent of impacts within the Galliard Zone north of monitoring well location MW-603 has not been delineated. Additional data will be required to delineate and characterize the vertical and horizontal extent of groundwater impacts in this area. In addition, according to the September 2014 16th Semiannual Corrective Action Effectiveness Report, dense non-aqueous phase liquid (DNAPL) was detected in monitoring locations MW-603 and MW-502D. Please ensure that the delineation and characterization activities in the area of MW-603 also include the delineation and characterization of the detected source material.
   b. Horizontal delineation the bedrock impacts to the northwest of monitoring well MW-318.
   c. Vertical delineation to the extent that will be influential to the established Remedial Action Objectives will need to be completed for the site.
   d. Please note that arsenic was detected in monitoring location MW-408S at 0.143 mg/L and nickel at monitoring location MW-306SAP at 0.378 mg/L. Please provide additional information relating to the origin of these particular contaminants and a determination of their associated delineation requirements.

AGLC Response: *Additional investigation of the areas listed in comment 5) a. and 5) b. above will be completed to support horizontal delineation in the referenced areas. A description of the planned additional investigation is presented in Section 4.0 of the Status Report. Vertical delineation to the extent that will be influential to the established RAOs will be evaluated and discussed in a future semi-annual report. MW-408S and MW-306SAP are both located on non-AGLC owned properties that may have impacts from their own property use or adjacent land use (i.e., gas station, railroad, city streets) and are likely not related to releases from former MGP operations since inorganic impacts are the primary constituents detected in these wells. MW-408S is approximately 1400 feet north by north west of Block A, and MW-306SAP is on Block A north of the gas station, as shown in Appendix C. These two wells will continue to be monitored as part of the ongoing groundwater sampling program, however ALGC does not consider the detected constituents in these wells to be indicative of releases from former MGP operations. Therefore, additional delineation efforts are not necessary at this time.*

6) Please include a proposed corrective action for the above referenced DNAPL source material identified in the areas of MW-502D and MW-603.

AGLC Response: *A vacuum truck will be deployed to attempt to remove product in MW-603 and will then be monitored to observe how quickly, if at all, product re-enters the well. DNAPL recovery observations will assist in developing appropriate next steps. Since MW-502D has only had a sheen of DNAPL observed, an interface probe will be*

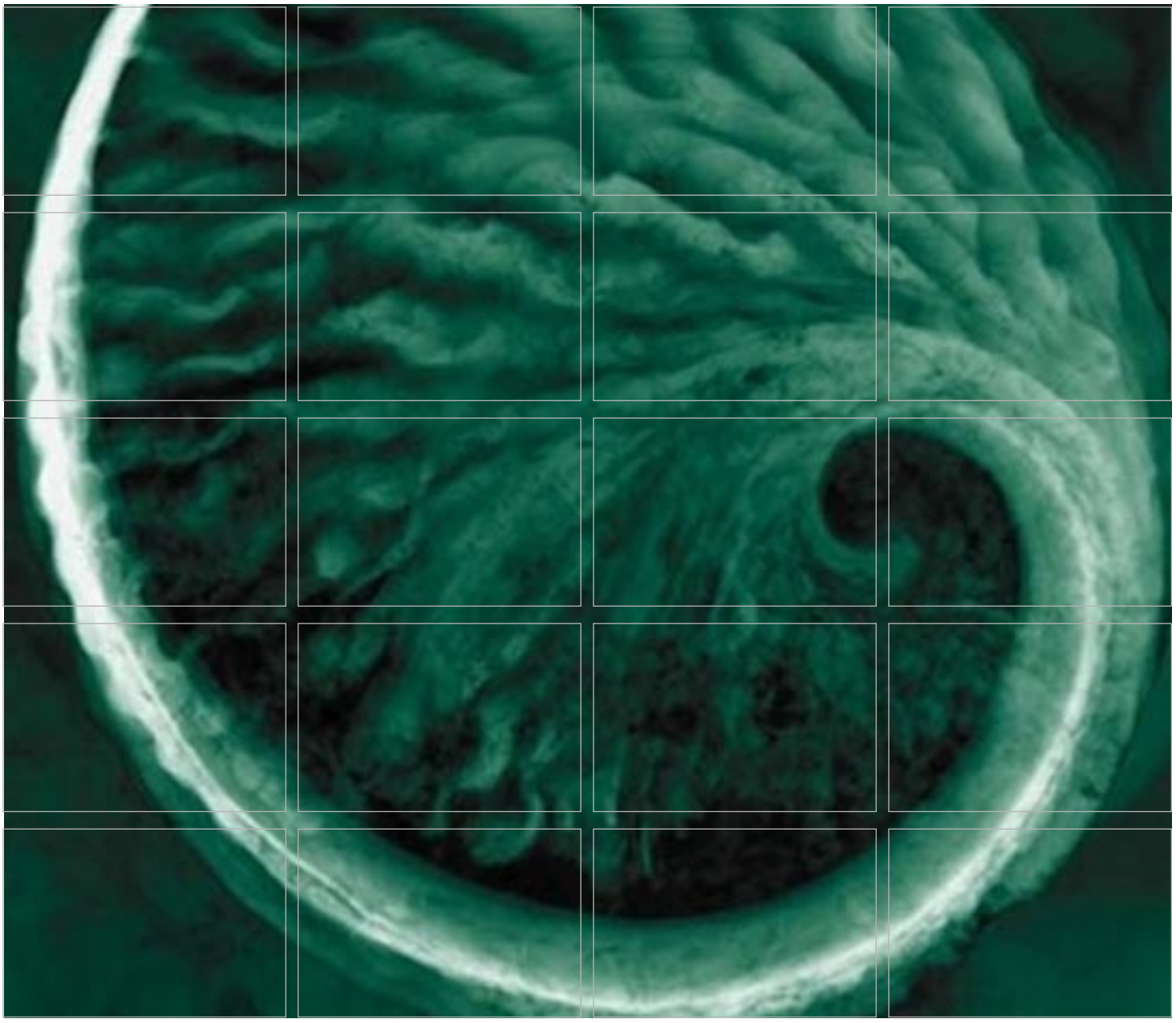
used to evaluate conditions in MW-502D to assist in determining appropriate action which may include vacuum removal if measurable DNAPL is present. Prior to product removal from MW-603, a sample of the observed product will be collected for future analysis for site COIs. If measurable product is observed in MW-502D, a sample will also be collected for site COIs. A description of this scope of work is provided in Section 4.5 of the Status Report.

7) According the available file information for the subject site, a May 13, 2010, Continuing Action Monitoring Plan (CAMP) exists and includes deed restriction and affidavit documentation for multiple site related parcels. Please ensure that the warranty deed documentation included in the VIRP incorporates all pertinent deed documentation from this CAMP, and that the VIRP clearly links each of the warranty deed documents included in Appendix B to each of the listed qualifying properties.

AGLC Response*: Pertinent deed documentation from the CAMP has been added and is included in Appendix D of the Status Report.*

8) Please note that as part of future site related institutional controls that may be implemented as part of the VIRP, new Uniform Environmental Covenants (UEC) will need to be executed for all parcels where source materials will be left in place, in particular the parcels associated with the ISS remedy. For any additional parcels not associated with the ISS remedy but overlying the groundwater plume (above risk reduction standards), pre-existing groundwater use deed restrictions that were implemented as part of prior institutional controls will be acceptable. However, EPD is recommending that for any parcels that are found to overly the groundwater plume without pre-existing deed restrictions in place that all practical attempts be made to enact new UECs for these applicable parcels. Please note that at this time EPD cannot concur with the sole use of the Augusta-Richmond County Code well restriction to demonstrate the groundwater exposure pathway for these applicable parcels will remain incomplete during the future property use(s). In addition, please note that, as mentioned in Comment (3) above, implementation of the institutional controls for the impact to groundwater may require the installation of additional groundwater monitoring well locations to supplement the conceptual site model and ultimately limit the amount of parcels requiring UECs.

AGLC Response: *Comment noted. AGLC intends to work collaboratively with EPD to address the groundwater exposure pathway through the practical use of governmental and proprietary institutional controls to prevent exposure. The groundwater exposure pathway and related application of institutional controls will be further discussed with EPD and evaluated after implementation of remediation.*



17th Semiannual Corrective Action Effectiveness Report: January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia HSI #10132

May 29, 2015

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TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 BACKGROUND 2
2.1 GROUNDWATER MONITORING AND EVALUATION STUDIES 4
2.2 SCOPE OF WORK 5
2.2.1 Field Tasks 5
2.2.2 Reporting Tasks 5
2.3 GROUNDWATER MONITORING NETWORK 5
2.3.1 On-Site Wells Sampled 6
2.3.2 Off-Site Wells Sampled 7
2.4 GROUNDWATER SAMPLING AND ANALYSIS 7
2.5 QUALITY CONTROL/QUALITY ASSURANCE SAMPLES 8
2.6 MANAGEMENT OF INVESTIGATION WASTE 9
3.0 GROUNDWATER MONITORING RESULTS 10
3.1 GROUNDWATER FLOW AND ELEVATIONS 10
3.2 GROUNDWATER ANALYTICAL RESULTS 12
3.2.1 Alluvium 12
3.2.2 Galliard Formation 13
3.2.2.1 Volatile Organic Compound Results 13
3.2.2.2 Semivolatile Organic Compound Results 14
3.2.2.3 Inorganic Compound Results 14
3.2.3 Saprolite 14
3.2.4 Transition Zone 15
3.2.5 Bedrock 15
3.2.5.1 Volatile Organic Compound Results 15
3.2.5.2 Semivolatile Organic Compound Results 16
3.2.5.3 Inorganic Compound Results 16
3.3 NATURAL ATTENUATION PARAMETERS 16
3.3.1 Electron Acceptors 17
3.3.1.1 Dissolved Oxygen and Oxidation-Reduction Potential 17
3.3.1.2 Nitrate 17
3.3.1.3 Sulfate 18
3.3.1.4 Carbon Dioxide 18
3.3.2 Biodegradation Byproducts 19
3.3.2.1 Methane 19
3.3.2.2 Ferrous Iron 19
3.3.3 Summary of Natural Attenuation Evaluation 20
3.3.4 Quality Assurance, Quality Control, and Data Validation 20
4.0 DATA COMPARISON AND SUMMARY 22
4.1 ALLUVIUM WELLS 22
4.2 GALLIARD WELLS 22
4.3 SAPROLITE WELLS 23
4.4 TRANSITION ZONE WELLS 24
4.5 BEDROCK WELLS 24
5.0 PERFORMANCE AND OPERATIONS OF BEDROCK GROUNDWATER EXTRACTION SYSTEM 25
5.1 PERFORMANCE AND OPERATIONS 25
5.2 MASS REDUCTION CALCULATIONS 26
6.0 CONCLUSIONS 27
7.0 REFERENCES 29

LIST OF TABLES

2-1 Monitoring Well Network Summary
2-2 Monitoring Well Construction Summary
2-3 Site-Specific Constituents of Interest and Monitored Natural Attenuation Parameters
3-1 Depth to Water and Groundwater Elevations – January 12, 2015
3-2 Groundwater Analytical Results for Alluvium Wells
3-3 Groundwater Analytical Results for Galliard Formation Wells
3-4 Groundwater Analytical Results for Saprolite Wells
3-5 Groundwater Analytical Results for Transition Zone Wells
3-6 Groundwater Analytical Results for Bedrock Wells
3-7 Detections and RRS Exceedances in the Alluvium Wells
3-8 Detections and RRS Exceedances in the Galliard Formation Wells
3-9 Detections and RRS Exceedances in the Saprolite Wells
3-10 Detections and RRS Exceedances in the Transition Zone Wells
3-11 Detections and RRS Exceedances in the Bedrock Wells
5-1 Treatment System Effluent Sample Results
5-2 Extraction Wells Operational Data
5-3 Mass Reduction Calculations in Bedrock Groundwater

LIST OF FIGURES

1-1 Site Location Map
2-1 Groundwater Monitoring Well Network
3-1 Groundwater Elevation Map for the Alluvium – January 12, 2015
3-2 Groundwater Elevation Map for the Galliard – January 12, 2015
3-3 Groundwater Elevation Map for the Saprolite – January 12, 2015
3-4 Groundwater Potential Map for the Bedrock and Transition Wells – January 12, 2015
3-5 Type I RRS Exceedances for the Alluvium Wells – January 2015
3-6 Type I RRS Exceedances for the Galliard Formation Wells – January 2015
3-7 Type I RRS Exceedances for the Saprolite Wells – January 2015
3-8 Type I RRS Exceedances for the Bedrock and Transition Wells – January 2015
3-9 Benzene and Naphthalene Isoconcentration Map for the Galliard Formation – January 2015
3-10 Benzene and Naphthalene Isoconcentration Map for the Bedrock Formation and Transition Wells – January 2015
3-11 Natural Attenuation Parameters in Alluvium Groundwater – January 2015
3-12 Natural Attenuation Parameters in Galliard Formation Groundwater – January 2015
3-13 Natural Attenuation Parameters in Saprolite Groundwater – January 2015
3-14 Natural Attenuation Parameters in Bedrock and Transition Wells Groundwater – January 2015

LIST OF APPENDICES

A *Groundwater Sampling Log Sheets*
B *Laboratory Analytical Reports*
C *Seepage Velocity Calculations*
D *ERM Analytical Data Validation Checklist*
E-1 *Summary of Historical Groundwater Sampling Data – Alluvium, Galliard, and Saprolite Monitoring Wells*
E-2 *Summary of Historical Groundwater Sampling Data – Transition Zone and Bedrock Monitoring Wells*
E-3 *Summary of Historical Groundwater Sampling Data – Decommissioned Monitoring Wells*
F *Concentration Trend Graphs*
G *Mass Removal Trend Graphs*
H *Continuing Action Monitoring Plan Inspection*

PROFESSIONAL CERTIFICATION PAGE

17th SEMIANNUAL CORRECTIVE ACTION EFFECTIVENESS REPORT – JANUARY 2015 GROUNDWATER MONITORING EVENT
ATLANTA GAS LIGHT COMPANY
FORMER MANUFACTURED GAS PLANT SITE
AUGUSTA, GEORGIA
HSI NO. 10132

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

Adria Reimer, P.G. #002004

May 26, 2015

1.0 INTRODUCTION

Environmental Resources Management (ERM) has prepared this 17th Semiannual Corrective Action Effectiveness Report (CAER) on behalf of Atlanta Gas Light Company (AGLC). This report summarizes the results of the groundwater monitoring event performed in January 2015 at the former manufactured gas plant (MGP) Site in Augusta, Georgia (the Site).

The Site includes property owned by AGLC and formerly used for MGP operations, property owned by AGLC not used for MGP operations, surrounding and nearby parcels not owned by AGLC, a portion of the Third Level Canal, and city right-of-ways (ROW). The Site is divided between the "on-Site" areas for the AGLC property where former MGP operations were located (i.e., Northern Parcel, Southern Parcel, Western Parcel, and Southeastern Bituminous Parcel) and the "off-Site" areas for properties that were not part of the former MGP operations. The Site layout and location map (Figure 1-1) shows the setting of the AGLC property within the city of Augusta, Richmond County, Georgia.

The purpose of this report is to:

- Fulfill requirements of Consent Order EPD-VRP-011issued December 3, 2014;
- Fulfill requirements for groundwater monitoring outlined in the 2001 Corrective Action Plan (CAP) prepared for AGLC by ThermoRetec Consulting Corporation (ThermoRetec, 2001);
- Monitor changes in groundwater constituent-of-interest (COI) concentrations to determine post-remediation groundwater quality;
- Present monitored natural attenuation (MNA) results and evaluate MNA processes at the Site in the alluvium, Galliard Formation, saprolite, and bedrock groundwater units; and
- Confirm the continued stability of Galliard and bedrock groundwater plume extents.

2.0 BACKGROUND

Excavation and *in-situ* solidification (ISS) operations were completed for the Northern Parcel and Car Wash areas during fall 2003. In 2004, soil removal (excavation) activities were completed at Blocks A, E, G, and H; 8th Street and Fenwick Street; and along five segments of the Third Level Canal (designated Reach D, Reach E, Reach F, Reach G, and Reach H). The excavation and ISS remedial activities within the Northern Parcel were documented in the August 9, 2005, *Northern Parcel Corrective Action Closure Report* prepared by MACTEC and approved by the Georgia Department of Natural Resources, Environmental Protection Division (EPD) on February 24, 2006.

In-situ chemical oxidation (ISCO) of the church area (Block E), along the 8th Street ROW, within the Gas Station parcel, and along the Walton Way ROW was completed in November 2005. A *Corrective Action Closure Report* (CACR) for these off-Site areas (OU-1 and -2) was submitted by MACTEC on January 16, 2009, and was approved by EPD in a letter dated March 30, 2009. A separate CACR was also prepared for the Third Level Canal (OU-3) following completion of remediation activities adjacent to the CSX Railroad property. The CACR for OU-3 was submitted by MACTEC on January 16, 2009, and approved by EPD in a letter dated March 30, 2009. A bedrock groundwater extraction and treatment system has operated at the Site since November 2006. Groundwater is extracted from MW-307BR and MW-308BR, treated via activated carbon, and discharged to the publicly owned treatment works (POTW).

A supplemental bedrock investigation was performed by AECOM in July 2008 and included the installation of nine additional bedrock monitoring wells (MW-503BR, MW-504BR and MW-506BR through MW-512 BR). Results of this investigation are summarized in AECOM's *Bedrock Ground Water Investigation Report* dated February 19, 2009. All the installed bedrock monitoring wells were subsequently added to the monitoring network.

In correspondence dated March 6, 2009, AGLC responded to EPD's comments to the 4th CAER and provided a proposed approach and timeframe to develop a Site Conceptual Model (SCM) and conduct groundwater modeling (following approval by EPD of the SCM), and prepare a feasibility study (FS; following approval by EPD of the Ground Water Modeling Report) in order to address the Site as a whole and better define an effective path to closure. A draft SCM dated June 19, 2009, was submitted to EPD by Environmental Cost Management, Inc. (ECM) on behalf of AGLC. A revised SCM, addressing EPD comments dated August 3, 2009, was submitted by ECM on October 2, 2009. The revised SCM presented changes to the well network that were approved in EPD's August 3, 2009, letter. These changes to the monitoring well network were incorporated into the current sampling event. A revised SCM was submitted to EPD on December 28, 2009, and approved by EPD in a letter dated March 19, 2010.

A supplemental data gap investigation was performed by ECM in October 2010 in accordance with the recommendations of the December 2009 SCM. The investigation included the installation of one additional bedrock monitoring well (MW-513BR), and the installation of four additional Galliard Formation monitoring wells (MW-600, MW-601, MW-602, and MW-603). In addition, one alluvium well (MW-04) and five Galliard Formation wells (MW-18, MW-201, MW-210, MW-305, and MW-407D) were decommissioned based on the recommendations of the EPD-approved SCM. MW-408D was abandoned and replaced with MW-408DR. Results of this investigation are summarized in ECM's *Data-Gap Investigation and Monitoring Well Installation/Decommissioning Report* dated February 14, 2011. The installed monitoring wells have been included in the monitoring well network.

The results of the 2010 data gap investigation were incorporated in ECM's *Site Conceptual Model Addendum* (SCM Addendum) dated February 17, 2012. The SCM Addendum recommended an overall reduction to the monitoring well network, and the continued inclusion of bedrock monitoring wells MW-504BR and MW-510BR within the well network to monitor plume control. In a May 23, 2012 letter, the EPD approved a number of the reductions, including the abandonment of five wells (MW-11, MW-23, MW-211, MW-312, and MW-314), and the elimination of sampling and/or gauging in a number of Discrete Depth Sampling Port (DDSP) wells. Well abandonment work was completed in July 2012, with the exception of MW-211, which was not abandoned due to access issues and will be abandoned during future activities. Ongoing groundwater monitoring reflects the revised monitoring well network, which was documented in Table 3-8 of ECM's June 22, 2012 response to the EPD's May 23, 2012 letter.

The *Ground Water Flow and Transport Model* report was submitted to the EPD on June 5, 2012. The EPD provided comments on June 29, 2012. In general, the comments discussed the need for inclusion of a sensitivity analysis and a detailed calibration of the model results to historical monitoring data. A response with the additional analysis was provided to the EPD on August 14, 2012. In accordance with the Site-wide approach developed in 2009, an FS was prepared based on the results of the *SCM Addendum* and the groundwater modeling. The FS was submitted to the EPD on December 13, 2012, and recommended excavation in Block C (D'Antignac Street), with MNA in the street areas and Block E as access issues, utilities, and the presence of buildings limit effective implementation of a remedy. The FS also recommended discontinuing operation of the bedrock groundwater extraction system.

EPD provided comments to the FS in correspondence dated October 9, 2013, and required that actions be taken to address remaining source materials in all areas of the Site, including the street areas and Block E. Rather than submitting a revised FS, the EPD requested that the comments be addressed in a Revised Corrective Action Plan. In subsequent meetings and correspondence with EPD, it was agreed that AGLC would submit a Revised CAP by August 29, 2014.

After further evaluation and coordination, AGLC and EPD agreed that the Augusta MGP Site was a candidate for enrollment in the Georgia Voluntary Remediation Program (VRP). AGLC received a letter from EPD concurring with moving the Augusta MGP Site into the VRP contingent on execution of a new Consent Order moving the Augusta MGP Site into the VRP as well as submittal of an acceptable Voluntary Investigation and Remediation Plan (VIRP) in lieu of a Revised Corrective Action Plan (RCAP) by August 28, 2014., consistent with the original RCAP submittal deadline. The VIRP was hand-delivered to the EPD on August 28, 2014.

Proposed Consent Order EPD-VRP-011 was transmitted by EPD to AGLC on June 27, 2014 for review and signature. AGLC signed the proposed Consent Order and transmitted back to EPD on July 22, 2014. The public notice period for the proposed Consent Order EPD-VRP-011 closed on September 10, 2014. Additionally, to demonstrate AGLC's commitment to enrolling the Augusta MGP Site in the VRP, AGLC submitted an initial VIRP Application Form and Checklist with associated VRP application fee on August 6, 2014.

On behalf of AGLC, AMEC submitted the Voluntary Investigation and Remediation Plan (VIRP) to EPD on August 28, 2014. The VIRP provided the proposed remediation approach, schedule and supporting documentation, and included an updated VIRP Application form. The EPD approved the VIRP application in a December 3, 2014 letter, which also set forth the required schedule for semiannual progress reports on June 1st and December 1st of each year, and additional requirements for the December 1, 2017 progress report. A second letter from EPD, also dated December 3, 2014, provided additional technical comments on the VIRP, which are to be addressed in subsequent progress reports.

Groundwater sampling events conducted between 2001 and 2006 were summarized in previous semiannual groundwater monitoring reports. Groundwater sampling events conducted after completion of corrective actions described above from 2007 through the present have been summarized in CAERs.

2.1 GROUNDWATER MONITORING AND EVALUATION STUDIES

This semiannual corrective action effectiveness groundwater monitoring and evaluation event was conducted in accordance with the *Ground Water Monitoring and Evaluation Plan* presented as Section 5.0 of the 2001 *CAP* (ThermoRetec, 2001) and, in part, the *Update of the Revised Ground Water Monitoring Plan* (GMP; ENSR Correspondence, May 2007). The sampling event conducted in January 2015 was the 17th groundwater sampling event in the post-ISCO monitoring period as outlined in the revised *Basis of Design Work Plan* (LAW, 2002).

This section of the report describes procedures used for groundwater gauging, sampling, chemical analysis, quality assurance/quality control (QA/QC), and management of investigation-derived waste. Groundwater samples were collected using low-flow methods with peristaltic pumps.

2.2 SCOPE OF WORK

The 17th semiannual corrective action effectiveness groundwater sampling event included the following field and reporting tasks:

2.2.1 Field Tasks

- Gauge groundwater levels.
- Sample groundwater.
- Manage investigation-derived waste.

2.2.2 Reporting Tasks

- Prepare groundwater elevation maps for the alluvium, Galliard, and saprolite units.
- Prepare groundwater potentiometric surface contour lines within the bedrock and transition units.
- Prepare summary tables of laboratory analytical results for COI.
- Evaluate analytical results relative to Type 1 Risk Reduction Standards (RRS).
- Prepare maps showing Type 1 RRS exceedances for COI in alluvium, Galliard formation, saprolite, and transition zone/bedrock.
- Prepare benzene and naphthalene isoconcentration maps for the Galliard Formation and bedrock.
- Evaluate MNA indicator parameters.

2.3 GROUNDWATER MONITORING NETWORK

The list of wells selected for semiannual corrective action monitoring and evaluation was submitted to the EPD on July 8, 2001, along with the rationale for their inclusion. As noted earlier, the bedrock monitoring wells installed in July 2008 were included in the July 2014 sampling event.

As indicated in ERM's November 14, 2008 response to EPD, long-term inclusion of these wells in the monitoring network was evaluated based on the sampling results. In addition, the four Galliard monitoring wells and one bedrock monitoring well installed in October 2010 were included in this sampling event. The February 2012 *SCM Addendum* proposed further modifications to the monitoring well network. Most of these modifications were approved by the EPD in correspondence dated May 23, 2012. The revised monitoring well network was documented in Table 3-8 of ECM's June 22, 2012 response to the EPD. The current status of each active monitoring network well is listed in Table 2-1, and the locations of the existing monitoring wells are shown on Figure 2-1. The well list has been revised to reflect the comments in EPD's May 23, 2012 correspondence regarding the SCM Addendum.

Sixty (60) monitoring wells were included in the sampling network during the January 2015 sampling event. Two monitoring wells have been destroyed by activities associated with City of Augusta contractors (MW-5 and MW-506BR). MW-506BR was paved over during improvements to Dyess Park and is no longer accessible for sampling. MW-5 was destroyed during work conducted by the City of Augusta Canal Authority during construction of the Canal Trail. In addition, three monitoring wells were not sampled due to the presence of dense non-aqueous phase liquid (DNAPL) observed during gauging (MW-205, MW-502D, and MW-603). As a result, groundwater samples were collected from fifty-five (55) monitoring wells. A summary of well construction information is included as Table 2-2.

2.3.1 On-Site Wells Sampled

The following on-Site wells were sampled in January 2015:

MW-12	MW-19	MW-202DR	MW-203	MW-207
MW-213	MW-308BR	MW-310SAP	MW-310BR	MW-311
MW-402S	MW-402D	MW-508BR	MW-601	

- MW-5 has been destroyed by the City of Augusta Canal Authority during construction of the Canal Trail. As such, MW-5 was not sampled.
- MW-205 was not sampled due to DNAPL observed in the well.

2.3.2 *Off-Site Wells Sampled*

Off-Site monitoring wells sampled in January 2015 include the following:

- City of Augusta ROW: MW-21, MW-22, MW-206, MW-214, MW-313, MW-408DR, MW-408S, MW-500BR, MW-503BR, MW-504BR, MW-507BR, MW-509BR, MW-510BR, and MW-513BR
- Augusta Civic Center Authority: MW-318, MW-320, and MW-325
- AGLC owned and/or leased to Miracle Making Ministries: MW-401S, MW-401D, MW-401SAP, MW-404DR, MW-501S, MW-505D, and MW-602
- Miracle Making Ministries: MW-304
- Amoco: MW-306D, MW-306SAP, MW-306TZ, MW-306BR, MW-511BR, MW-512BR, and MW-600
- Joseph Norris: MW-303 and MW-309BR
- Georgia Power: MW-307D, MW-307SAP, MW-307BR, MW-321, and MW-324
- The Catholic Church of the Most Holy Trinity: MW-319
- United States Post Office: MW-315
- MW-502D and MW-603 were not sampled due to DNAPL observed in the well during purging.
- MW-506BR has been paved over (destroyed) by the City of Augusta sometime between July 2012 and January 2013. As such, MW-506BR has not been sampled since July 2012.

2.4 *GROUNDWATER SAMPLING AND ANALYSIS*

During the initial groundwater gauging task, the condition of each well was noted, including the concrete surface seal, outer casing, inner expandable well cap, and lock. ERM replaced or repaired any well caps or locks that were damaged or missing. In addition to MW-5 and MW-506BR, which have been destroyed, damage to the well vault lids and locking caps were noted for MW-408S and MW-408DR. AGL has contacted the Canal Authority regarding this damage and repairs are being scheduled. Prior to sampling, all wells were gauged with an oil-water interface meter for depth to water.

Due to the historical detections of non-aqueous phase liquid (NAPL) at MW-205, MW-502D, and MW-603 care was taken to prevent possible cross contamination. A dedicated interface probe was dropped to the bottom of these wells following the groundwater gauging event to assess whether NAPL was present. NAPL was detected at the bottom of well MW-603 and a non-continuous detection of NAPL thickness was measured within the well column of MW-205 and MW-

502D. Due to the detections of NAPL, MW-205, MW-502D, and MW-603 were not sampled.

Before groundwater samples were collected, each well was purged using low-flow/low-volume techniques conducted in accordance with ERM's standard operating procedures, which are based on technical guidelines from U.S. Environmental Protection Agency Region 4 Science and Ecosystem Support Division Operating Procedures (USEPA, 2013). Monitoring wells experiencing excessive drawdown (>0.3 feet) were purged by removing a minimum of three well volumes or until the well ran dry, with the exception of bedrock wells where the removal of so large a volume was infeasible. In addition, the DDSP wells were purged by removing a minimum of three volumes, or until dry, because the small diameter of the well prevents simultaneous monitoring of the depth to water. The purpose of purging the well is to draw fresh formation water into the well so that the samples are representative of the portion of the aquifer surrounding the well. If a well was completely evacuated during purging, it was allowed to recharge and the groundwater sample was collected immediately after the well had fully recharged.

Field documentation of groundwater quality measurements included pH, conductivity, temperature, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity. Field parameter values and corresponding purge volumes were recorded on groundwater sampling forms. Copies of these forms for the January 2015 sampling event are included in Appendix A.

Groundwater samples were analyzed for the COI list (Table 2-3) as referenced in the CAP and the revised GMP. Analytical Environmental Services (AES) laboratory performed the analytical services. Laboratory analytical reports are provided in Appendix B.

The post-remedy semiannual monitoring reports include an evaluation to determine if MNA is a viable remedy for alluvial, Galliard Formation, saprolite, or bedrock groundwater. MNA parameters analyzed during the January 2015 sampling event are also listed in Table 2-3. MNA analyses were performed by AES.

2.5 *QUALITY CONTROL/QUALITY ASSURANCE SAMPLES*

Field QC samples were collected and analyzed to document the accuracy and precision of the laboratory. QC samples included:

- Trip Blanks. One trip blank accompanied each cooler containing volatile organic compound (VOC) samples sent to the laboratory. Trip blanks were analyzed to determine if any contaminants were introduced while

samples were stored or while in transit to the laboratory. Trip blanks were analyzed for VOCs only.

- Field Duplicates. Six field duplicates were collected, one from each of the following wells: MW-12, MW-306TZ, MW-307BR, MW-308BR, MW-315, and MW-401SAP. All duplicate samples were analyzed for COI and DUP-02, DUP-03, and DUP-06 (surrogate samples MW-315, MW-12, and MW-401SAP, respectively) were also analyzed for selected MNA parameters. Duplicates were collected to determine the precision of groundwater sample analysis and the variability of collection procedures.
- Matrix Spikes and Matrix Spike Duplicates. A total of three Matrix Spike and Matrix Spike Duplicate (MS/MSD) sample sets were collected from MW-207, MW-401SAP, and MW-309 as part of the laboratory analytical batch QC.

2.6 MANAGEMENT OF INVESTIGATION WASTE

All purge water from sampling activities was treated by the on-Site treatment system prior to ultimate discharge to the publicly owned treatment works (POTW). Personal protective equipment and other trash was placed in bags and deposited in solid waste containers.

3.0 GROUNDWATER MONITORING RESULTS

This section summarizes results of the January 2015 corrective action monitoring and evaluation event, including groundwater flow and elevations, analytical results, QA/QC, and data validation.

3.1 GROUNDWATER FLOW AND ELEVATIONS

During the January 2015 sampling event, all groundwater wells were inspected and the groundwater levels were gauged and recorded, as applicable. Groundwater elevation data derived from water level measurements collected in January 2015 is presented in Table 3-1. With the exception of porosity for the bedrock hydrogeologic unit, seepage velocity calculations in each unit are based on hydraulic conductivity estimates provided in the 2009 *Site Conceptual Model*, the average of porosity estimates given in the 2003 *Remedial Investigation* report, and January 2015 horizontal hydraulic gradients calculated by solving three-point problems for wells screened in each unit. Parameters (and sources, where applicable) used to calculate seepage velocity in each hydrogeologic unit and the resultant seepage velocity is summarized in Appendix C. The groundwater pump and treat system was shut off for a carbon changeout December 29, 2014 and remained off for fourteen (14) days prior to the gauging event on January 12, 2015. Therefore, the January 2015 groundwater flow and directions are indicative of ambient conditions.

The ISS masses have created an obstacle to groundwater flow on the Northern Parcel and on the former Car Wash property, since the hydraulic conductivity of each mass is several orders of magnitude lower than that of the surrounding alluvium in those portions of the shallow aquifer. The lower hydraulic conductivity of each mass (ranging from 10^{-9} to 10^{-7} centimeters per second) causes increased groundwater flow in the more permeable alluvium. Because groundwater cannot effectively flow through the ISS mass, no groundwater elevation contours are associated with this area.

Prior to soil remediation and ISS, groundwater flow in both the alluvium and Galliard Formation was generally in an easterly direction, with exception of seasonal conditions in the unconfined alluvium aquifer, which sometimes reversed the direction of flow into the Third Level Canal. Alluvium groundwater in January 2015 flowed toward the Northern Parcel from the north (MW-306S and MW-501S), west (MW-402S), and the south (MW-17 and MW-401S) (Figure 3-1). Seepage velocity in alluvial groundwater is estimated to be $1.2*10^{-1}$ ft/day.

The general post-ISS local flow pattern in the Galliard Formation has been an easterly flow, with a steeper groundwater gradient along the western boundary of the canal west of the Northern Parcel with a zone of nearly flat gradient encompassing the Site. This pattern is observed during the January 2015 monitoring event with overall groundwater flowing easterly, toward the Savannah River (Figure 3-2). The groundwater flow conditions observed beginning in January 2011 differed from the pattern during previous monitoring events conducted from January 2008 through July 2010, where localized mounding occurred around the Site and groundwater flowed radially outward. Groundwater flow in the Galliard unit is influenced by the extremely low hydraulic conductivity of the ISS mass in the Northern Parcel and Car Wash area, which causes groundwater downgradient (east) of the ISS mass in the Northern Parcel to form a near-stagnant zone of very low gradient. Groundwater flow is complex in the immediate vicinity of the ISS masses, leading to some variability in localized groundwater flow patterns from event to event. Seepage velocity in Galliard groundwater outside the ISS mass is estimated to range from $2.4*10^{-3}$ to $9.9*10^{-3}$ ft/day.

The January 2015 groundwater elevation data for the saprolite unit indicates groundwater flow trends east towards MW-214 (Figure 3-3). The differences in the groundwater elevations between MW-307SAP (located adjacent to MW-307BR) and MW-306SAP (located approximately 250 feet upgradient of MW-307BR) were previously compared for operating and non-operating periods. In July 2008 (system shutdown), the elevation difference was 0.36 feet, while in January and July 2009 (system running) the elevation differences were 2.39 and 2.45 feet, respectively. Comparisons of elevation data for MW-214 (located near MW-308BR) and MW-309SAP (located over 400 feet downgradient) during the same time periods indicate similar relationships. This suggests that the bedrock extraction system influences groundwater flow within the saprolite. Any groundwater flow in saprolite (or bedrock) interpreted near or adjacent to the ISS mass is assumed to flow under the mass. Groundwater flow is possible in the saprolite unit since ISS was keyed only into the top of saprolite and not completed through the entire vertical extent of the unit. The elevation of groundwater in saprolite is lower than the elevation of the bottom of the ISS mass and therefore, interpreted groundwater flow is beneath the ISS mass. Seepage velocity in saprolite groundwater is estimated to be $8.6*10^{-5}$ ft/day.

The bedrock aquifer is a crystalline-rock aquifer that exhibits very high interconnectivity of the fracture sets and foliation planes to such a degree that groundwater flow simulates an anisotropic porous medium. Groundwater flow, as well as dissolved constituent transport, is dominated by the northeast-southwest orientation of the primary fracture system (see the *Bedrock Ground Water Investigation Report* [AECOM, 2009] for a more detailed discussion of the bedrock features).

Potentiometric surface contour lines are presented in Figure 3-4 to infer potential groundwater flow directions in bedrock in January 2015 following over seven years of extraction system operation.

Because of the influence of bedrock fracture orientation, localized groundwater flow is not necessarily perpendicular to the potentiometric surface at all locations. Since fractured bedrock aquifers are inherently anisotropic and heterogeneous, calculation of seepage velocity may not be representative using bulk porosity estimates. However, a range of porosity estimates may provide bounds on the expected seepage velocity of the bedrock aquifer. As presented in Appendix C, multiple estimates of seepage velocity were calculated by solving three-point problems for different areas of the Site and using a range of porosity estimates from the literature. The calculated range of seepage velocity in bedrock aquifer at the Site is between $6.5*10^{-3}$ and $6.1*10^{-1}$ ft/day.

Based on January 2015 data collected under ambient (non-pumping) conditions, groundwater flow in bedrock appears to be toward the southeast (Figure 3-4). The groundwater recovery well at MW-307BR, which has subsequently returned to operation following the January 2015 sampling event, has historically captured groundwater in the bedrock from up to 900 feet to the northeast as was evidenced by the groundwater gradient towards the pumping wells at MW-325 in previous reports.

3.2 GROUNDWATER ANALYTICAL RESULTS

Analytical results for groundwater samples collected in January 2015 from wells monitoring the various aquifers are summarized in Tables 3-2 through 3-6. These results were compared to Type 1 Risk Reduction Standards (RRS). Detected concentrations exceeding the Type 1 RRS are presented in Figures 3-5 through 3-8. Field sampling forms are included in Appendix A, copies of the laboratory analytical reports are provided in Appendix B, and data validation reports are attached in Appendix D. A complete summary of all analytical data collected for the groundwater monitoring program (since 2001) is provided in Appendix E. A summary of the January 2015 benzene and naphthalene monitoring results and comparison to historical data is presented in Section 4.

3.2.1 Alluvium

Analytical results for samples collected from alluvium monitoring wells were compared to their respective Type 1 RRS in Table 3-2. The number of alluvium monitoring wells sampled, number of detections for each COI, range of concentrations, and wells with Type 1 RRS exceedances is summarized in Table 3-7. The locations where exceedances occurred and the concentrations of COI detected above the Type 1 RRS during the January 2015 groundwater monitoring event are shown in Figure 3-5. Benzene (MW-501S) was the only VOC or SVOC detected above Type 1 RRS and arsenic (MW-408S) and cadmium (MW-501S) were the only exceedances are reported for groundwater samples collected at alluvium monitoring wells.

Benzene and cadmium were reported at MW-501S at concentrations of 35 µg/L and 0.0153 mg/L, respectively above the Type 1 RRS of 5 µg/L and 0.005 mg/L, respectively. Benzene has not historically been detected in MW-501S, which is located on the west side of the canal.

Prior to this event, all benzene results have been non-detect since February 2007, with the exception of an estimated concentration (0.37J µg/L) in July 2010. Arsenic was reported at 0.222 mg/L above the Type 1 RRS of 0.05 mg/L in the groundwater sample collected at MW-408S.

3.2.2 Galliard Formation

Analytical results of samples collected from the Galliard Formation wells were compared to their respective Type 1 RRS, as summarized in Table 3-3. The number of Galliard monitoring wells sampled, number of detections for each COI, range of concentrations, and wells with Type 1 RRS exceedances is summarized in Table 3-8. The locations where exceedances occurred and the concentrations of COI detected above the Type 1 RRS during the January 2015 groundwater monitoring event are shown in Figure 3-6. The distributions of benzene and naphthalene concentrations in groundwater samples collected from the Galliard Formation are depicted in Figure 3-9.

The greatest number of COI and the highest detected concentrations are found in groundwater sampled from wells MW-12, MW-600, and MW-601 located in the northeast corner of the Southern Parcel, in the city ROW south of Block A, and in the western-central portion of Block E, respectively (Figures 3-6 and 3-9). Monitoring wells MW-205, MW-502D and MW-603 contained DNAPL and were not sampled.

3.2.2.1 Volatile Organic Compound Results

During the January 2015 sampling event, benzene concentrations exceeding the applicable Type 1 RRS in groundwater were reported at four (4) well locations (MW-12, MW-304, MW-600 and MW-601). Ethylbenzene concentrations exceeding the applicable Type 1 RRS were reported in two (2) groundwater samples (MW-12 and MW-601). Toluene concentrations exceeding the applicable Type 1 RRS were reported in two (2) groundwater samples (MW-600 and MW-601; Table 3-3 and Table 3-8). The distribution of detected VOCs, specifically MGP-related compounds, in groundwater samples collect from the Galliard formation is similar to that reported in previous events.

Trichloroethylene (TCE) concentrations exceeding the applicable Type 1 RRS in groundwater were reported at well locations MW-21 and MW-401D. TCE is not an MGP-related constituent. No other VOCs were detected at MW-21 and MW-401D.

Specific VOCs were analyzed at a dilution due to the concentration of target compounds exceeding the calibration range of the instrument. The dilution factor and subsequent laboratory reporting limit exceeded the Type 1 RRS for specific VOCs analyzed in groundwater samples collected at monitoring wells MW-600 and MW-601 (Table 3-3). Samples that were analyzed at a dilution exceeding the Type 1 RRS have been highlighted in Table 3-3. The laboratory reports indicate the dilution factor for each laboratory sample (Appendix B).

3.2.2.2 Semivolatile Organic Compound Results

The number of SVOC detections and exceedances of Type 1 RRS and the respective wells in which the exceedances occurred are presented in Table 3-8. The spatial distribution of SVOC Type 1 RRS exceedances within the Galliard Formation are represented in Figure 3-6. During the January 2015 sampling event, naphthalene concentrations exceeding the applicable Type 1 RRS in groundwater were reported at four (4) well locations (MW-12, MW-304, MW-600 and MW-601). An isoconcentration map showing naphthalene distribution is presented as Figure 3-9. The distribution of SVOCs remains consistent with those reported in previous events.

3.2.2.3 Inorganic Compound Results

The data presented in Table 3-3, Table 3-8, and on Figure 3-6 indicate that the only inorganic compounds to exceed Type 1 RRS during the January groundwater monitoring event were as follows:

- Selenium at MW-207 was detected at 0.0687 mg/L, above the Type 1 RRS of 0.05 mg/L;
- Cadmium at MW-401D was detected at 0.0358 mg/L, above the Type 1 RRS of 0.005 mg/L; and
- Arsenic at MW-408DR was detected at 0.429 mg/L, above the Type 1 RRS of 0.05 mg/L.

The laboratory reporting limit for antimony (0.02 mg/L), beryllium (0.01 mg/L) and thallium (0.02 mg/L) exceeded the respective Type 1 RRS values (Table 3-3).

3.2.3 Saprolite

Analytical results for groundwater samples collected from the saprolite wells were compared to their respective Type 1 RRS in Table 3-4. The number of monitoring wells with detections and Type 1 RRS exceedances for the saprolite unit are presented in Table 3-9 and Figure 3-7.

Concentrations detected at MW-311 exceeded the Type 1 RRS for benzene (5 µg/L) at 370 µg/L and naphthalene (20 µg/L) at 560 µg/L, and at MW-401SAP exceeded the Type 1 RRS for TCE (5 µg/L) at 20 µg/L. TCE is not an MGP-

related constituent. No other VOCs or SVOCs exceeded Type 1 RRS for saprolite wells in the January sampling event.

Nickel concentrations were reported above Type 1 RRS (0.1 mg/L) at MW-306SAP (0.151 mg/L) and MW-310SAP (0.336 mg/L). No other inorganic compounds were detected at concentrations exceeding Type 1 RRS. Laboratory reporting limits for antimony (0.02 mg/L), beryllium (0.01 mg/L) and thallium (0.02 mg/L) exceeded the respective Type 1 RRS values.

3.2.4 Transition Zone

Analytical results for samples collected from transition zone well MW-306TZ are compared to their respective Type 1 RRS in Table 3-5. Type 1 RRS exceedances for the transition zone well are presented in Table 3-10. As shown on Figure 3-8, naphthalene was detected at a concentration exceeding the Type 1 RRS (20 µg/L) in MW-306TZ at 300 µg/L. There were no Type 1 RRS exceedances for VOCs or inorganic compounds in MW-306TZ during the January 2015 sampling event.

3.2.5 Bedrock

Bedrock sampling results reported from the January 2015 groundwater monitoring event were compared to their respective Type 1 RRS in Table 3-6. The number of bedrock monitoring wells sampled, number of detections for each COI, range of concentrations, and wells with Type 1 RRS exceedances are summarized in Table 3-11. The detected constituent concentrations exceeding Type 1 RRS and the locations of the monitoring wells are depicted in Figure 3-8.

3.2.5.1 Volatile Organic Compound Results

As shown on Figure 3-8, benzene, ethylbenzene, and toluene were the only VOCs detected at concentrations exceeding the Type 1 RRS in bedrock monitoring wells during the January 2015 sampling event.

- Benzene concentrations exceeded the Type 1 RRS (5 µg/L) in nine (9) bedrock monitoring wells ranging from a low of 35 µg/L at MW-503BR to a high of 13,000 µg/L at MW-500BR;
- Ethylbenzene was detected at concentrations exceeding the Type 1 RRS in four (4) bedrock monitoring wells: MW-213 (1,500 µg/L), MW-307BR (2,100 µg/L), MW-308BR (810 µg/L), and MW-500BR (1,200 µg/L); and
- Toluene was detected at concentrations exceeding the Type 1 RRS (1,000 µg/L) at MW-308BR (2,100 µg/L).

Specific VOCs were analyzed at a dilution due to the concentration of target compounds exceeding the calibration range of the instrument. The dilution factor and subsequent laboratory reporting limits exceeded the Type 1 RRS for specific VOCs analyzed in groundwater samples collected at monitoring wells

MW-307R, MW-308R, and MW-500BR. Samples that were analyzed at a dilution exceeding the Type 1 RRS have been highlighted in Table 3-6. The laboratory reports indicate the dilution factor for each sample ID (Appendix B).

3.2.5.2 *Semivolatile Organic Compound Results*

One or more SVOCs were detected at concentrations exceeding their Type 1 RRS in groundwater samples collected at eight (8) bedrock well locations during the January 2015 sampling event (Figure 3-8, Table 3-6, and Table 3-11). Naphthalene was the primary SVOC detected above Type 1 RRS (20 µg/L) at concentrations ranging from 150 µg/L (MW-511BR) to 14,000 µg/L (MW-213). Concentrations and specific COIs detected in bedrock groundwater samples above Type 1 RRS are similar to those reported in previous events.

3.2.5.3 *Inorganic Compound Results*

The only Type 1 RRS exceedances for metals in bedrock groundwater was for cadmium (Type 1 RRS value of 0.005 mg/L) in monitoring well MW-325 (0.0090 mg/L). Laboratory reporting limits for antimony (0.02 mg/L), beryllium (0.01 mg/L), and thallium (0.02 mg/L) exceeded the respective Type 1 RRS values.

3.3 NATURAL ATTENUATION PARAMETERS

During the January 2015 groundwater monitoring event samples were collected from the subset of alluvium, Galliard Formation, saprolite, transition zone and bedrock monitoring wells identified in the GMP and analyzed for MNA parameters. This is the 12th monitoring event for MNA parameters at the former Augusta MGP Site, where MNA evaluation is being performed to determine if it is a viable remedy for the alluvial (alluvium and Galliard Formation), saprolite, and bedrock groundwater units. A comparison between individual MNA parameters and COI concentrations in groundwater is presented in this section. AGLC plans on discontinuing sample collection of MNA parameters until the corrective actions performed under the VRP have been completed.

The following analytes were eliminated from the monitoring program following the July 2006 event, since they were either not detected or their concentrations did not exhibit distributions that were pertinent to the continued evaluation of natural attenuation processes:

Total Iron
Manganese (total and dissolved)
Ammonia nitrogen (as N)
Sulfide

MNA parameters for selected alluvium, Galliard Formation, saprolite, and bedrock monitoring wells are shown on Figures 3-11 through 3-14.

3.3.1 Electron Acceptors

When DO is present in groundwater at sites impacted by non-chlorinated organic contaminants, microorganisms will preferentially use the oxygen as a terminal electron acceptor as they oxidize organic compounds to carbon dioxide and water.
However, when oxygen is not present or has been consumed (below 2.0 mg/L), microorganisms may use available alternative electron acceptors (ferric iron, manganese (IV), nitrate, sulfate, and carbon dioxide) to metabolize organic compounds.

In the course of this process, electron acceptors are converted to their respective reduced forms (ferrous iron, manganese (II), nitrite, sulfide, and methane), which are then released as byproducts of the metabolic processes. Thus, measuring and comparing concentrations and distributions of electron acceptors and reduced metabolic byproducts to concentrations and distributions of organic constituents can reveal a pattern indicative of biodegradation activity.

A description of electron acceptors detected in groundwater from the Site is provided in the following sections.

3.3.1.1 Dissolved Oxygen and Oxidation-Reduction Potential

Field measurements indicated concentrations of DO in the Galliard groundwater unit ranged from 0.18 mg/L in MW-600 to 7.73 mg/L in MW-206, while DO concentrations in bedrock ranged from 0.33 mg/L in MW-213 to 2.24 mg/L in MW-507BR. Low dissolved oxygen in groundwater reflects oxygen potentially used during biodegradation of organic compounds. The observed DO distribution is consistent with both the distribution of organic impacts and methane data. Wells with elevated concentrations of organic COI and/or methane generally exhibited lower DO values. All DO laboratory analyses performed by AES utilizing Method SM4500-O-G were received and analyzed beyond the specified hold time of "immediate or fifteen (15) minutes."

Most impacted Galliard wells (MW-12, MW-22, MW-202DR, MW-304, MW-401D, MW-404DR, MW-505D, MW-600, MW-601 and MW-602) had a negative ORP while most unimpacted wells had a positive ORP. All impacted bedrock wells had a negative ORP. The data suggest that biodegradation of MGP-related organic constituents is consuming available oxygen and results in an anaerobic geochemical environment near impacted wells.

3.3.1.2 Nitrate

Nitrate concentrations ranged from not detected (mostly in impacted wells) to 9.8 mg/L (in MW-310SAP, an unimpacted well).

Nitrate was detected in groundwater samples collected from wells MW-401D and MW-401SAP, where only TCE concentrations exceeded the Type 1 RRS.

The overall lower nitrate concentrations observed in wells impacted by organic compounds, other than TCE, indicates the potential for biodegradation of benzene, toluene, ethylbenzene, and xylenes (BTEX) and SVOCs (i.e., non-chlorinated hydrocarbons) may be occurring at the Site through a nitrate reduction pathway.

3.3.1.3 Sulfate

Sulfate concentrations in alluvium and Galliard Formation ranged from non-detect in several monitoring wells to 140 mg/L in MW-401D. Concentrations of sulfate in Galliard monitoring wells were reported at lower concentrations in monitoring wells with detections of SVOCs and BTEX. The overall lower sulfate concentrations observed in wells impacted by BTEX and SVOCs may indicate the potential for biodegradation to occur through a sulfate reduction pathway within the overburden.

In the saprolite unit, the sulfate was not detected in MW-311, which is the only monitoring well with detectable concentrations of benzene. The range of sulfate concentrations in the saprolite monitoring wells may indicate the potential for biodegradation to occur through a sulfate reduction pathway.

Sulfate concentrations in bedrock wells impacted by BTEX and/or SVOCs above Type 1 RRS ranged from not detected in MW-318 to 6.7 mg/L in MW-503BR and from not detected in MW-309BR to 38 mg/L in MW-507BR. Concentrations of sulfate in bedrock wells do not appear to indicate evidence of biodegradation of dissolved organic COI through a sulfate reduction pathway.

3.3.1.4 Carbon Dioxide

Laboratory measurements of carbon dioxide ranged from 59.7 mg/L (MW-22) to 499 mg/L (MW-505D) in the Galliard Formation monitoring wells. Carbon dioxide was reported at elevated concentrations (>250 mg/L) in all Galliard Formation wells (MW-12, MW-304, and MW-505D) with BTEX detections.

In the saprolite, SVOC-impacted well MW-311, reported a concentration of 329 mg/L for carbon dioxide. Wells in the saprolite not impacted by SVOCs reported lower concentrations of carbon dioxide, ranging from 61.1 mg/L (MW-310SAP) to 108 mg/L (MW-214).

Laboratory measurements of carbon dioxide in bedrock wells ranged from not detected (MW-503BR) to 172 mg/L (MW-318) in wells impacted with BTEX and from not detected (MW-508BR) to 269 mg/L (MW-512BR) in wells with detections of BTEX. Concentrations of carbon dioxide in bedrock wells do not appear to indicate evidence of biodegradation.

Dissolved concentrations of carbon dioxide mostly show the potential for biodegradation via reduction of carbon dioxide to methane. In addition, elevated dissolved concentrations of carbon dioxide in impacted wells in the Galliard Formation and saprolite may be evidence that biodegradation is occurring with carbon dioxide as a final end product of aerobic biodegradation.

3.3.2 Biodegradation Byproducts

As described previously, the distribution of reduced metabolic byproducts at a site can also provide evidence of natural biodegradation processes. A description of the biodegradation byproducts that were measured during the January 2015 groundwater monitoring event is provided in the following sections.

3.3.2.1 Methane

Within the Galliard Formation wells, methane concentrations ranged from not detected (several wells) to 150 µg/L (MW-303) in no BTEX detections, and from 3,700 µg/L (MW-12) to 9,800 µg/L (MW-505D) in wells impacted by BTEX.

Methane concentrations were not detected in two of the three wells in unimpacted saprolite wells, while the groundwater sample collected from MW-311 (impacted) indicated a methane concentration of 410 µg/L.

Methane concentrations in bedrock wells impacted by BTEX range from 8 µg/L in MW-503BR to 980 µg/L in MW-509BR. Methane concentrations in non-BTEX impacted bedrock wells ranged from not detected (MW-309BR and MW-507BR) to 4,900 µg/L (MW-512BR). Methane concentrations were lower in bedrock wells reporting not detected results of BTEX, except for MW-512BR which has historically had BTEX detections and has low detected concentrations of SVOCs.

The overall distribution of methane is consistent with the plume of dissolved MGP-related organic constituents (i.e., organic COI other than TCE), suggesting that the biodegradation of these constituents at the Site includes a methanogenic metabolic pathway.

3.3.2.2 Ferrous Iron

Ferrous iron concentrations in the Galliard Formation ranged from not detected (< 0.100 mg/L) in several wells to 32.7 mg/L in MW-304. Bedrock concentrations for ferrous iron ranged from not detected (<0.100 mg/L) in several wells to 6.53 mg/L in MW-315. Concentrations of ferrous iron were generally higher in wells impacted by BTEX and SVOCs.

The overall greater number of impacted wells containing elevated concentrations of ferrous iron indicates that biodegradation of dissolved MGP-related organic COI may be occurring at the Site through an iron reduction pathway.

3.3.3 *Summary of Natural Attenuation Evaluation*

The observed distributions of DO, ORP, CO_2, nitrate, sulfate, ferrous iron, and methane correspond to the distributions of dissolved MGP-related organic COI, and are therefore indicative of natural biodegradation processes.
AGLC plans to discontinue sample collection of MNA parameters until the corrective actions performed under the VRP have been completed.

3.3.4 *Quality Assurance, Quality Control, and Data Validation*

All field QA/QC data, and at least 10 percent of the VOC, SVOC, and inorganic data presented in the analytical reports, were reviewed by ERM's data validation specialist. Laboratory analytical reports for all samples are provided in Appendix B, and the data validation reports for VOC, SVOC, and inorganic data are included in Appendix D. These data were reviewed in accordance with the USEPA Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services (USEPA, 2008/2011).

As shown in Appendix D, ERM's data validation specialist reviewed sample delivery groups 1501859, 1501895, 1501A32, 1501A82, 1501B40, and 1501N94. The following items were included in the data validation review:

- Surrogate recoveries,
- Relative percent difference (RPD) between primary/field duplicate samples,
- Field and laboratory blank contamination,
- Holding times, sample receipt conditions, dilution factors, chains of custody,
- Trip blanks, and
- Sample duplicates.

As shown in Appendix D, the duplicate sample results received from the laboratory correlated well with those from parent samples collected during the January 2015 event; of a total of seventy-seven (77) RPD calculations, three calculations showed differences exceeding 30 percent between parent and duplicate samples. Each of the three exceedances occurred in sample MW-12-20150114-01. The analysis for oxygen in sample MW-12-20150114-01, one of the three analytes showing a differences of greater than 30 percent between parent and duplicate samples, was flagged as being outside of the fifteen-minute hold time for analysis under the reporting method. Other analytes with calculated differences in MW-12-20150114-01 exceeding 30 percent RPD between parent and duplicate samples include pyrene and acenaphthylene.

Three MS/MSD sample sets were collected and analyzed as part of the laboratory analytical batch QC (MW-207-20150129-01, MW-401-201501SAP-01, and MW-309-20150109-01). The data validation review (Appendix D) includes a detailed discussion of sample integrity.

As noted in Appendix D, the holding time of fifteen minutes was exceeded for all samples submitted for oxygen analysis to AES.

Following the January groundwater sampling event, QA/QC of the purge logs indicated that four wells (MW-207, MW-307D, MW-309BR, and MW-401SAP were incorrectly purged and either insufficient volume was removed or parameter were not stabilized prior to sample collection. Results for samples were invalidated and not included in the report but are included in the laboratory reports. The wells were resampled on January 29, 2015 and the results included in the report.

4.0 DATA COMPARISON AND SUMMARY

AGLC performed an empirical evaluation of the groundwater data collected from the beginning of the corrective action groundwater monitoring and evaluation program (2001) through present (January 2015) and compared the most recent data to the historic program dataset to determine if there were any trends toward improvement or degradation of groundwater quality.

Data comparison discussion for COI focus on benzene (the primary VOC contaminant), naphthalene (the primary SVOC contaminant), and TCE (the only chlorinated VOC COI).

Results of data queries are presented as historical data summary tables presented in Appendix E. Graphs reflecting temporal concentration changes of benzene and naphthalene are presented in Appendix F. Graphs were created for wells with historical detections of benzene and naphthalene.

4.1 ALLUVIUM WELLS

Based on the evaluation of dissolved-phase constituents in the alluvium wells during this monitoring period, no discernable groundwater plume exists in the alluvium aquifer. However, reported concentrations for benzene exceeded Type 1 RRS at MW-501S (35 µg/L) for the first time since the well was installed prior to the February 2007 sampling event. MW-501S will continue to be evaluated to assess concentration trends at this location.

4.2 GALLIARD WELLS

Data collected during the January 2015 monitoring event indicate the following:

- Naphthalene and benzene continue to be below their respective Type 1 RRS in Galliard Formation monitoring wells west of the Third Level Canal and east of King Street with the exception of MW-304.(Figure 3-6). The benzene concentration reported for MW-304 (27 µg/L) continues a decreasing concentration trend since the January 2010 concentration (800 µg/L). Although the naphthalene concentration was higher in January 2015 (27 µg/L) than in the July 2014 sampling event (12 µg/L), the overall trend is still decreasing.

- The extent of benzene and naphthalene concentrations reported to exceed the Type 1 RRS in the Galliard Formation north of the Site appears similar to those seen in recent (after January 2011) monitoring events. MW-603

continues to be the northern most impacted well and was not sampled in January 2015 due to the presence of DNAPL during gauging. DNAPL (1.45 feet) was detected using an interface probe while gauging well MW-603 during the January 2015 sampling event (Table 3-1). DNAPL was previous reported in MW-603 during the July 2013, January and July 2014 sampling events.

- MW-505D is located along the southern edge of the naphthalene plume. Detections of naphthalene at MW-505D were first reported in July 2012. The naphthalene concentration high was reported in July 2013 (870 µg/L). Since July 2012, an increase in methane concentrations along with a decrease in carbon dioxide concentrations and a drop in DO show potential for biodegradation to be occurring (Appendix E). Naphthalene concentrations were reported during January 2015 (4.2 µg/L) at a concentration below Type 1 RRS (20 µg/L) for the first time since January 2012.

- Concentrations of benzene and naphthalene remain highest in groundwater samples collected from the northeast corner of the southern parcel (MW-12), city ROW south of Block A (MW-600), and the western portion of Block E (MW-601). Groundwater samples collected from the Galliard monitoring wells MW-12, MW-600, and MW-601 report concentrations of benzene at 3,600 µg/L, 25,000 µg/L, and 6,900 µg/L, respectively; and naphthalene concentrations at 4,900 µg/L, 5,400 µg/L, and 6,500 µg/L, respectively (Figure 3-6).

- Groundwater samples collected from MW-21 and MW-401D reported concentrations of TCE above the Type 1 RRS (5 µg/L) at 18 µg/L and 18 µg/L, respectively. TCE has previously been detected in these wells and is not an MGP-related COI.

4.3 SAPROLITE WELLS

Six (6) saprolite monitoring wells were sampled during the January 2015 monitoring event. VOC concentrations exceeding Type 1 RRS were reported in two groundwater samples, benzene in sample MW-311 (370 µg/L) and TCE in sample MW-401SAP (20 µg/L). The January 2015 sample results from MW-311 had increased concentrations of benzene (370 µg/L) and naphthalene (560 µg/L) compared to recent events. However, concentrations remain well below historic highs at this location (Appendix F).

4.4 TRANSITION ZONE WELLS

Naphthalene was the only COI reported above Type 1 RRS in the transition zone monitoring well, MW-306TZ, sampled in January 2015. Naphthalene was reported in the groundwater sample collected from MW-306TZ at 300 µg/L. This concentration shows a continued decline from reported concentrations in February 2007 (6,800 µg/L) and January 2010 (4,800 µg/L). No other detections of COI were reported above their respective Type 1 RRS.

4.5 BEDROCK WELLS

Data collected during the January 2015 monitoring event indicate the following:

- Elevated concentrations of benzene and naphthalene continue to be present in the area northeast of the Northern Parcel near MW-307BR. Stable concentration trends of benzene and naphthalene continue to be observed at MW-307BR since pumping began the well.

- The highest concentrations of benzene were reported in MW-500BR located south of Northern Parcel on the southern side of the canal. Benzene concentrations appear to be trending upwards at this location (Appendix F).

- MW-319 continues to delineate Type 1 RRS exceedances in bedrock groundwater to the northeast. No COI were detected above Type 1 RRS in groundwater samples collected from MW-319.

- Bedrock well MW-315 delineates Type 1 RRS exceedances to the northwest. Bedrock well MW-507BR delineates the extent of naphthalene impacts in bedrock to the south-southwest in Block J, while bedrock well MW-508BR delineates the extent of naphthalene in bedrock to the southeast. Benzene and naphthalene were not detected in MW-507BR, MW-508BR, or MW-513BR during the January 2015 sampling event.

5.0 PERFORMANCE AND OPERATIONS OF BEDROCK GROUNDWATER EXTRACTION SYSTEM

Bedrock monitoring wells MW-307BR and MW-308BR were converted to groundwater extraction wells in 2006. The groundwater extraction and treatment system has been continuously operated since start up on November 30, 2006 with the exception of temporary shutdowns due to routine maintenance activities. MW-307BR and MW-308BR continue to be sampled through the extraction system as part of semiannual monitoring, but are no longer gauged. MW-308BR was sampled by use of a peristaltic pump during the January 2015 sampling event as the pump in the recovery well was damaged and not operational during the sampling event.

This section describes operations and maintenance (O&M) activities that were performed on the bedrock groundwater extraction and treatment system at the Site from September 1, 2015 through April 1, 2015. The program includes ongoing evaluation of the hydraulic containment induced by the groundwater extraction system, recommendations for continued monitoring, and corrective actions for operational issues. System performance in removing impacted mass during this period is also evaluated.

5.1 PERFORMANCE AND OPERATIONS

Effluent samples are collected monthly for the permitted discharge requirements, with additional analyses run on a quarterly basis as set forth by the City of Augusta. Discharge Monitoring Reports are submitted monthly to the City of Augusta Pretreatment Coordinator in accordance with permit requirements. Analytical results of samples collected between September 2014 and April 2015 are summarized in Table 5-1. There were no exceedances of the permit effluent limitations.

The treatment system has been running consistently since it was turned on (November 30, 2006), with only intermittent periods of shut down due routine repairs and maintenance. During this operational period (September 1, 2014 through April 3, 2015), the extraction system was shut down between September 22, 2014 – October 10, 2014 and December 29, 2014 – January 30, 2015 for carbon replacement (Table 5-2). During restart of the system on January 30, 2015, the groundwater pump connected to MW-308BR was found to be damaged. The system is currently operating with the use of MW-307BR only.

The total volume of groundwater extracted during this period of groundwater extraction was 1,445,752 gallons (630,506 gallons from MW-307BR and 815,246 gallons from MW-308BR) (Table 5-3). Activated carbon was changed out in

September 2014 and January 2015 to ensure optimal system operation and compliance with discharge requirements.

5.2 *MASS REDUCTION CALCULATIONS*

The total mass of benzene and naphthalene removed from bedrock groundwater during the period of system operation beginning September 1, 2014 and running through March 31, 2015 was calculated by multiplying the total volume extracted from the system by the concentration of benzene and naphthalene detected in each extraction well, where: *Mass (kilograms) = volume extracted (gallons) x concentration (µg/L).* The total calculated mass of benzene and naphthalene extracted from MW-307BR during this period was 28.64 kilograms and 19.33 kilograms, respectively. Similarly, the total mass of benzene and naphthalene extracted from MW-308BR was 20.37 kilograms and 10.49 kilograms, respectively. The input parameters for the mass reduction calculations are presented in Table 5-3. These calculations will continue to be performed during each monitoring period. Graphs showing the trends of the mass removal are provided in Appendix G.

6.0 CONCLUSIONS

The following conclusions are derived from the data and analyses presented in this report:

- The only exceedance of organic COI in alluvium monitoring wells sampled in January 2015 was for benzene in MW-501S. The benzene exceedance in MW-501S was the first since installation of the well. Benzene will continue to be monitored at this location.

- Arsenic in MW-408S and cadmium in MW-501S were the only inorganic COI reported to exceed Type 1 RRS in alluvium monitoring wells.

- The distribution of dissolved organic COI is generally consistent with previous events and provides continued evidence that the Galliard and bedrock plumes are stable.

- Six (6) wells in the Galliard Formation (MW-12, MW-21, MW-304, MW-401D, MW-600, and MW-601) exceeded RRS for select organic COI. The sole RRS exceedance in MW-21 (located approximately 1300 feet east of the Northern Parcel) was TCE, which is not an MGP-related constituent.

- Selenium (MW-207), cadmium (MW-401D), and arsenic (MW-408DR) were the only inorganic COI exceeding Type 1 RRS in Galliard groundwater samples during the January 2015 sampling event.

- DNAPL was observed in three wells (MW-205, MW-502D, and MW-603), located within the Galliard groundwater plume during the January 2015 sampling event, and these wells were not sampled.

- Organic COI concentrations exceeding Type 1 RRS were reported in two groundwater samples collected from wells installed in the saprolite unit, benzene and naphthalene in sample MW-311 and TCE in sample MW-401SAP. Benzene and naphthalene concentrations remain well below historic highs in MW-311 (Appendix F).

- Nickel was reported in MW-306SAP and MW-310SAP in excess of the RRS. No other inorganic COI exceeded RRS in January 2015.

- The groundwater sample collected from MW-306TZ in July 2014 exceeded the Type 1 RRS for naphthalene only. There were no other RRS exceedances in transition zone wells sampled during this event.

- Benzene was the only VOC that exceeded Type 1 RRS in the following bedrock wells: MW-318, MW-503BR, MW-509BR, MW-510BR, and MW-511BR. Benzene and ethylbenzene exceeded Type 1 RRS in the following

bedrock wells: MW-213, MW-307BR, and MW-500BR. Benzene, ethylbenzene, and toluene exceedances were reported in MW-308BR.

- One or more SVOCs were detected in eight (8) bedrock monitoring wells in excess of RRS.

- Cadmium exceeded Type 1 RRS in well MW-325. There were no other inorganic COI exceedances during the January 2015 sampling event.

- Removal of contaminant mass has continued since the bedrock extraction and treatment system began operating in November 2006. The cumulative mass of benzene removed by the system since operation began totals 755.27 kilograms. The cumulative mass of naphthalene removed by the system since operation began totals 466.09 kilograms.

- AGLC proposes discontinuing MNA sampling until the corrective action has been completed.

The next semiannual groundwater monitoring event will be performed in July 2015 and the 18th Semiannual Corrective Action Effectiveness Report will be submitted as an appendix to a Semiannual Status Report in the VRP.

7.0 REFERENCES

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Tables

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Table 2-1
Monitoring Well Network Summary
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Well ID	Hydrogeologic Unit	Well Monitoring Status	Location
Alluvium Monitoring Wells			
MW-05*	Alluvium	Gauge and Sample	On-site
MW-17		Gauge Only	On-site
MW-306S		Gauge Only	Off-site
MW-401S		Gauge and Sample	Off-site
MW-402S		Gauge and Sample	On-site
MW-408S		Gauge and Sample	Off-site
MW-501S		Gauge and Sample	Off-site
Galliard Formation Monitoring Wells			
MW-12	Galliard	Gauge and Sample	On-site
MW-19		Gauge and Sample	On-site
MW-21		Gauge and Sample	Off-site
MW-22		Gauge and Sample	Off-site
MW-24	Upper Galliard	Gauge Only	Off-site
MW-25		Gauge Only	Off-site
MW-202DR	Galliard	Gauge and Sample	On-site
MW-203	Middle Galliard	Gauge and Sample	On-site
MW-205	Galliard	Gauge and Sample	On-site
MW-206		Gauge and Sample	Off-site
MW-207		Gauge and Sample	On-site
MW-303		Gauge and Sample	Off-site
MW-304		Gauge and Sample	Off-site
MW-306D		Gauge and Sample	Off-site
MW-307D		Gauge and Sample	Off-site
MW-309D		Gauge Only	Off-site
MW-310D		Gauge Only	On-site
MW-401D		Gauge and Sample	Off-site
MW-402D		Gauge and Sample	On-site
MW-404DR		Gauge and Sample	Off-site
MW-408D		Gauge and Sample	Off-site
MW-502D		Gauge and Sample	On-site
MW-505D		Gauge and Sample	Off-site
MW-600		Gauge and Sample	Off-site
MW-601		Gauge and Sample	On-site
MW-602		Gauge and Sample	Off-site
MW-603		Gauge and Sample	Off-site

Well ID	Hydrogeologic Unit	Well Monitoring Status	Location
Saprolite Monitoring Wells			
MW-214	Saprolite	Gauge and Sample	Off-site
MW-306SAP		Gauge and Sample	Off-site
MW-307SAP		Gauge and Sample	Off-site
MW-310SAP		Gauge and Sample	On-site
MW-311		Gauge and Sample	On-site
MW-401SAP		Gauge and Sample	Off-site
Transition Zone and Bedrock Monitoring Wells			
MW-213	Bedrock	Gauge and Sample	On-site
MW-306TZ	Transition Zone	Gauge and Sample	Off-site
MW-306BR	Bedrock	Gauge and Sample	Off-site
MW-307TZ	Transition Zone	Gauge Only	Off-site
MW-307BR	Bedrock	Gauge and Sample	Off-site
MW-308BR		Gauge and Sample	On-site
MW-309BR		Gauge and Sample	Off-site
MW-310BR		Gauge and Sample	On-site
MW-313		Gauge and Sample	Off-site
MW-315		Gauge and Sample	Off-site
MW-316		Gauge Only	Off-site
MW-318		Gauge and Sample	Off-site
MW-319		Gauge and Sample	Off-site
MW-320		Gauge and Sample	Off-site
MW-321		Gauge and Sample	Off-site
MW-322		Gauge Only	Off-site
MW-323		Gauge Only	Off-site
MW-324		Gauge and Sample	Off-site
MW-325		Gauge and Sample	Off-site
MW-500BR		Gauge and Sample	Off-site
MW-503BR		Gauge and Sample	Off-site
MW-504BR		Gauge and Sample	Off-site
MW-507BR		Gauge and Sample	Off-site
MW-508BR		Gauge and Sample	On-site
MW-509BR		Gauge and Sample	Off-site
MW-510BR		Gauge and Sample	Off-site
MW-511BR		Gauge and Sample	Off-site
MW-512BR		Gauge and Sample	Off-site
MW-513BR		Gauge and Sample	Off-site

Notes:
D - denotes well screened in the Galliard Formation
BR - denotes bedrock well (where used in well name)
TZ - denotes well screened in the Transition Zone in DDSP wells
Only those wells that are still considered active (e.g., not destroyed or abandoned) are included in this table.
* MW-05 Destroyed during Canal Authority's path improvements along canal

Table 2-2
Monitoring Well Construction Summary
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Date Installed	Well Type	Well Materials	Ground Surface Elevation (ft AMSL)	Top of Casing Elevation (ft AMSL)	Screened Interval (ft bgs)
Alluvium Monitoring Wells						
MW-05*	10/19/1985	II	PVC	130.00	132.11	4.2 - 18.6
MW-17	2/2/1992	II	SS	136.60	138.85	12.4 - 16.7
MW-306S	11/6/1998	DDSP	PVC	132.08	131.96	8.5 - 9.5
MW-401S	8/31/2000	II	PVC	134.44	136.89	10 - 20
MW-402S	8/30/2000	II	PVC	136.88	136.89	9 - 19
MW-408S	10/18/2000	II	PVC	133.65	133.31	10 - 20
MW-501S	1/17/2007	II	PVC	132.98	132.80	7 - 12
Galliard Formation Monitoring Wells						
MW-12	5/15/1986	II	PVC	131.80	131.31	20 - 30
MW-19	2/4/1992	II	SS	138.70	140.37	15.3 - 19.7
MW-21	12/8/1992	II	SS	129.80	128.54	22.3 - 27.9
MW-22	5/4/1994	II	PVC	130.60	129.60	18.3 - 22.3
MW-24	5/6/1994	II	PVC	131.10	130.21	8.3 - 12.3
MW-25	5/6/1994	II	PVC	129.80	128.88	18.9 - 22.9
MW-202DR	1/24/2007	II	PVC	131.70	131.59	24.5- 29.5
MW-203	11/14/1995	II	PVC	131.70	130.74	22.1 - 26.0
MW-205	11/22/1995	II	SS	132.20	130.94	23.3 - 28.1
MW-206	11/28/1995	II	PVC	130.90	130.06	23.9 - 27.8
MW-207	10/11/1995	II	PVC	130.40	132.68	20.6 - 24.6
MW-211	10/11/1995	II	PVC	139.60	138.59	20.5 - 24.4
MW-303	11/18/1998	II	PVC	129.63	129.37	25.5 - 30.5
MW-304	11/2/1998	II	PVC	131.63	131.51	31 - 36
MW-306D	11/6/1998	DDSP	PVC	132.08	131.89	24.5 - 25.5
MW-307D	11/10/1998	DDSP	PVC	130.53	130.45	24.5 - 25.5
MW-309D	11/8/1998	DDSP	PVC	129.97	129.79	27.5 - 28.5
MW-310D	11/3/1998	DDSP	PVC	138.79	138.70	27 - 28
MW-401D	8/31/2000	II	PVC	134.37	134.38	33 - 36
MW-402D	8/30/2000	II	PVC	136.89	136.95	24.7 - 26.2
MW-404DR	1/30/2007	II	PVC	133.10	133.15	16.5 - 21.5
MW-408D	2/22/2011	II	PVC	133.46	133.02	25 - 30
MW-502D	1/30/2007	II	PVC	131.20	131.18	20 - 26
MW-505D	1/31/2007	II	PVC	128.87	128.87	23.5 - 28.5
MW-600	10/19/2010	II	PVC	131.34	131.02	22 - 32
MW-601	10/20/2010	II	PVC	131.10	130.82	17 - 27
MW-602	10/19/2010	II	PVC	130.55	130.20	22 - 32
MW-603	10/19/2010	II	PVC	130.80	130.65	17 - 27

Notes:

ft AMSL - feet above mean sea level
ft bgs - feet below ground surface
II - double casing well
III - triple casing well
PVC - polyvinyl chloride
SS - stainless steel
Only active monitoring wells are included in this table.
DDSP - depth discrete sampling port
* MW-5 destroyed during Canal Authority's path improvement along canal

Table 2-2
Monitoring Well Construction Summary
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Date Installed	Well Type	Well Materials	Ground Surface Elevation (ft AMSL)	Top of Casing Elevation (ft AMSL)	Screened Interval (ft bgs)
Saprolite Monitoring Wells						
MW-214	12/7/1995	II	PVC	130.60	129.65	52.6 - 56.6
MW-306SAP	11/6/1998	DDSP	PVC	132.08	131.92	30.5 - 31.5
MW-307SAP	11/10/1998	DDSP	PVC	130.53	130.48	30.5 - 31.5
MW-309SAP	11/8/1998	DDSP	PVC	129.97	129.82	34.5 - 35.5
MW-310SAP	11/3/1998	DDSP	PVC	138.79	138.72	34 - 35
MW-311	11/20/1998	II	PVC	130.32	130.11	30 - 32
MW-317	9/6/2000	II	PVC	130.90	130.64	31 - 41
MW-401SAP	8/31/2000	II	PVC	134.23	134.27	38 - 48
Transition Zone and Bedrock Monitoring Wells						
MW-213	12/8/1995	III	PVC	131.90	130.92	58.5 - 62.5
MW-306BR	11/23/1998	III	PVC	132.03	131.81	55 - 80
MW-306TZ	11/6/1998	DDSP	PVC	132.08	131.93	58.5 - 59.5
MW-307BR	11/22/1998	III	PVC	130.75	130.27	48 - 73.25
MW-307TZ	11/10/1998	DDSP	PVC	130.53	130.48	46.5 - 47.5
MW-308BR	11/21/1998	III	PVC	131.34	131.08	55.5 - 80.5
MW-309BR	11/24/1998	III	PVC	129.84	129.54	83.75 - 109
MW-309TZ	11/8/1998	DDSP	PVC	129.97	129.76	76.5 - 77.5
MW-310BR	11/25/1998	III	PVC	139.72	139.49	65 - 90
MW-310TZ	11/3/1998	DDSP	PVC	138.79	138.72	73 - 74
MW-313	8/10/2000	III	PVC	129.01	129.02	61 - 86
MW-315	8/10/2000	III	PVC	131.91	131.74	59.5 - 85.5
MW-316	9/1/2000	III	PVC	130.71	130.51	88 - 119.8
MW-318	9/8/2000	III	PVC	130.94	130.75	62 - 87
MW-319	12/13/2000	III	PVC	133.20	132.98	55 - 80
MW-320	1/6/2001	III	PVC	132.08	131.74	70 - 76
MW-321	1/19/2001	III	PVC/SS	130.86	130.48	160 - 170.2
MW-322	12/14/2000	III	PVC	130.69	130.65	49 - 86
MW-323	12/15/2000	III	PVC	130.65	130.53	70.5 - 95
MW-324	5/31/2001	III	PVC/SS	130.83	130.98	209 - 215
MW-325	5/22/2001	III	PVC	131.53	131.44	95 - 115
MW-500BR	1/24/2007	III	PVC	132.76	132.66	64 - 79
MW-503BR	9/5/2008	III	PVC	131.80	131.57	56 - 76
MW-504BR	9/4/2008	III	PVC	131.10	130.91	60 - 80
MW-506BR	8/27/2008	III	PVC	139.70	139.23	66 - 81
MW-507BR	8/25/2008	III	PVC	139.10	138.76	106 - 125
MW-508BR	8/25/2008	III	PVC	130.50	133.26	70 - 86
MW-509BR	9/18/2009	III	PVC	131.10	130.63	56 - 76
MW-510BR	9/15/2008	III	PVC	131.00	130.76	60 - 80
MW-511BR	9/9/2008	III	PVC	131.20	130.82	56 - 76
MW-512BR	8/29/2008	III	PVC	132.00	131.70	64 - 84
MW-513BR	10/20/2010	III	PVC	132.40	132.03	51.5 - 82

Notes:

ft AMSL - feet above mean sea level
ft bgs - feet below ground surface
II - double casing well
III - triple casing well
PVC - polyvinyl chloride
SS - stainless steel
Only exisitng monitoring wells are included in this table.
DDSP - depth discrete sampling port

Table 2-3
Site-Specific Constituents of Interest and Monitored Natural Attenuation Parameters
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Volatile Organic Compounds (VOCs), (SW-846 Method 8260B)		
Acetone	Ethylbenzene	Trichloroethylene
Benzene	Methylene Chloride	Xylenes (total)
Carbon Disulfide	Toluene	
Semivolatile Organic Compounds (SVOCs), (SW-846 Method 8270C)		
Acenaphthene	Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene
Acenaphthylene	Benzo(k)fluoranthene	Naphthalene
Anthracene	Chrysene	Phenanthrene
Benzo(a)anthracene	Dibenzo(a,h)anthracene	Pyrene
Benzo(a)pyrene	Fluoranthene	
Benzo(b)fluoranthene	Fluorene	
Inorganics (SW-846 Methods 6010B, 7470A, 6020, and 9010/9012)		
Antimony	Copper	Thallium
Arsenic	Cyanide	Vanadium
Barium	Lead	Zinc
Beryllium	Mercury	
Cadmium	Nickel	
Chromium	Selenium	
Monitored Natural Attenuation Parameters		
Dissolved Gases (O_2, CO_2, Methane)	Ferrous Iron	Sulfate
	Nitrate	

Table 3-1
Depth to Water and Groundwater Elevations
January 12, 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Hydrogeologic Unit	Top of Casing (ft AMSL)	Well Casing Total Depth (ft BTOC)	Depth to Water (ft BTOC)	Groundwater Elevation (ft AMSL)	Thickness of NAPL (ft)
Alluvium Monitoring Wells						
MW-05	Alluvium	132.11	19.5	Destroyed		--
MW-17	Alluvium	138.85	16.94	11.63	127.22	--
MW-306S	Alluvium	131.96	8.6	7.38	124.58	--
MW-401S	Alluvium	136.89	19.15	10.19	126.70	--
MW-402S	Alluvium	136.89	19.25	13.62	123.27	--
MW-408S	Alluvium	133.31	19.1	8.35	124.96	--
MW-501S	Alluvium	132.80	11.68	7.20	125.60	--
Galliard Formation Monitoring Wells						
MW-12	Galliard	131.31	26.65	7.43	123.88	--
MW-19	Galliard	140.37	19.05	12.66	127.71	--
MW-21	Galliard	128.54	29.15	6.88	121.66	--
MW-22	Galliard	129.60	22.6	5.68	123.92	--
MW-24	Galliard	130.21	22.59	6.47	123.74	--
MW-25	Galliard	128.88	23.4	5.11	123.77	--
MW-202DR	Galliard	131.59	29.12	7.52	124.07	--
MW-203	Galliard	130.74	26.55	6.79	123.95	--
MW-205	Galliard	130.94	26.6	6.92	124.02	NAPL on probe, not measurable amount
MW-206	Galliard	130.06	28.35	6.12	123.94	--
MW-207	Galliard	132.68	26	6.03	126.65	--
MW-303	Galliard	129.37	30.55	6.14	123.23	--
MW-304	Galliard	131.51	36.12	8.43	123.08	--
MW-306D	Galliard	131.89	24.46	7.71	124.18	--
MW-307D	Galliard	130.45	23.98	5.78	124.67	--
MW-309D	Galliard	129.79	27.62	6.28	123.51	--
MW-310D	Galliard	138.70	27.4	14.31	124.39	--
MW-401D	Galliard	134.38	35.91	10.18	124.20	--
MW-402D	Galliard	136.95	26.41	12.72	124.23	--
MW-404DR	Galliard	133.15	21.47	7.55	125.60	--
MW-408DR	Galliard	133.02	29.8	8.35	124.67	--
MW-502D	Galliard	131.18	25.7	6.99	124.19	NAPL on probe, not measurable amount
MW-505D	Galliard	128.87	28.5	5.19	123.68	--
MW-600	Galliard	131.02	32	5.81	125.21	--
MW-601	Galliard	130.82	27	6.82	124.00	--
MW-602	Galliard	130.20	32	7.50	122.70	--
MW-603	Galliard	130.65	27	6.35	124.30	1.45

Notes:

ft = Feet

AMSL = above mean sea level

BTOC = below top of casing

NAPL = non-aqueous phase liquid

Table 3-1
Depth to Water and Groundwater Elevations
January 12, 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Hydrogeologic Unit	Top of Casing (ft AMSL)	Well Casing Total Depth (ft BTOC)	Depth to Water (ft BTOC)	Groundwater Elevation (ft AMSL)	Thickness of NAPL (ft)
Saprolite Monitoring Wells						
MW-214	Saprolite	129.65	57.1	6.72	122.93	--
MW-306SAP	Saprolite	131.92	31.23	7.71	124.21	--
MW-307SAP	Saprolite	130.48	29.75	7.31	123.17	--
MW-310SAP	Saprolite	138.72	34.11	14.40	124.32	--
MW-311	Saprolite	130.11	32.3	6.46	123.65	--
MW-401SAP	Saprolite	134.27	42.8	9.94	124.33	--
Transition Zone and Bedrock Monitoring Wells						
MW-213	Bedrock	130.92	62.31	7.77	123.15	--
MW-306TZ	TransZone	131.93	57.82	8.09	123.84	--
MW-306BR	Bedrock	131.81	78.99	8.04	123.77	--
MW-309BR	Bedrock	129.54	106	7.30	122.24	--
MW-310BR	Bedrock	139.49	89.23	9.51	129.98	--
MW-313	Bedrock	129.02	85.6	6.53	122.49	--
MW-315	Bedrock	131.74	85.51	7.77	123.97	--
MW-316	Bedrock	130.51	118.01	7.20	123.31	--
MW-318	Bedrock	130.75	87.15	7.47	123.28	--
MW-319	Bedrock	132.98	79.6	8.90	124.08	--
MW-320	Bedrock	131.74	68.44	8.50	123.24	--
MW-321	Bedrock	130.48	170	7.21	123.27	--
MW-322	Bedrock	130.65	86.1	7.32	123.33	--
MW-323	Bedrock	130.53	95	7.68	122.85	--
MW-324	Bedrock	130.98	215	7.76	123.22	--
MW-325	Bedrock	131.44	108.08	10.15	121.29	--
MW-500BR	Bedrock	132.66	54.9	8.84	123.82	--
MW-503BR	Bedrock	131.57	76	7.67	123.90	--
MW-504BR	Bedrock	130.91	80	7.02	123.89	--
MW-506BR	Bedrock	139.22	81	Destroyed		--
MW-507BR	Bedrock	138.75	126	16.87	121.88	--
MW-508BR	Bedrock	133.25	87	9.94	123.31	--
MW-509BR	Bedrock	130.63	76	6.85	123.78	--
MW-510BR	Bedrock	130.75	80	6.99	123.76	--
MW-511BR	Bedrock	130.82	76	6.98	123.84	--
MW-512BR	Bedrock	131.69	84	7.83	123.86	--
MW-513BR	Bedrock	132.03	82	8.49	123.54	--

Notes:

Created by: DGD

Checked by: BM

ft = Feet

AMSL = above mean sea level

BTOC = below top of casing

NAPL = non aqueous phase liquid

NM = not measured

MW-307BR and MW-308BR are used for groundwater extraction and depth to groundwater measurements are not collected

Table 3-2
Groundwater Analytical Results for Alluvium Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-05	MW-401S	MW-402S	MW-408S	MW-501S
		Sample Date	--	1/15/2015	1/12/2015	1/15/2015	1/15/2015
		Sample Type	Destroyed	N	N	N	N
Field Parameters	**Type 1**	**Units**					
Specific Conductivity	**--**	mS/cm	--	0.487	0.586	1.60	0.642
Dissolved Oxygen	**--**	mg/L	--	1.37	0.46	0.71	0.90
Oxidation-Reduction Potential	**--**	mV	--	51.6	210.1	-153.6	65.4
pH	**--**	pH units	--	5.38	5.90	7.36	6.35
Temperature	**--**	deg C	--	13.5	17.7	11.8	12.4
Turbidity	**--**	NTU	--	7.47	1.70	22.1	8.60
MNA							
Carbon dioxide	--	mg/L	--	168	--	--	323
Iron, as Ferrous (Fe+2)	--	mg/L	--	< 0.100	--	--	< 0.100
Methane	--	µg/L	--	< 4	--	--	< 4
Nitrate as N	--	mg/L	--	2.50	--	--	< 0.25
Oxygen	--	mg/L	--	7.46	--	--	8.62
Sulfate	--	mg/L	--	62	--	--	61
VOCs							
Acetone	4,000	µg/L	--	< 50	< 50	< 50	< 50
Benzene	5	µg/L	--	< 5.0	< 5.0	< 5.0	**35**
Carbon disulfide	4,000	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	--	< 5.0	< 5.0	< 5.0	**5.3**
Methylene chloride	5	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	--	< 5.0	< 5.0	< 5.0	**7.4**
Trichloroethene	5	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes	10,000	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
SVOCs							
Acenaphthene	2,000	µg/L	--	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	10	µg/L	--	< 1.0	< 1.0	< 1.0	< 1.0
Anthracene	10	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(a)anthracene	0.1	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	--	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	--	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Chrysene	0.2	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	--	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	--	< 0.10	< 0.10	**0.26**	< 0.10
Fluorene	1,000	µg/L	--	< 0.10	< 0.10	**0.40**	< 0.10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Naphthalene	20	µg/L	--	< 0.50	< 0.50	< 0.50	**5.0**
Phenanthrene	10	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Pyrene	1,000	µg/L	--	**0.064**	< 0.050	**0.096**	< 0.050
Inorganics							
Antimony	0.006	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	--	< 0.0500	< 0.0500	**0.222**	< 0.0500
Barium	2	mg/L	--	**0.112**	**0.0777**	**0.444**	**0.103**
Beryllium	0.004	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	--	< 0.0050	< 0.0050	< 0.0050	**0.0153**
Chromium	0.1	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Copper	1.3	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	--	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Mercury	0.002	mg/L	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Selenium	0.05	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Thallium	0.002	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Zinc	2	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
-- = Not Analyzed

Table 3-3
Groundwater Analytical Results for Galliard Formation Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-12	MW-12	MW-19	MW-21	MW-22	MW-202DR	MW-203	MW-205	MW-206	MW-207	MW-303	MW-304	MW-306D	MW-307D	MW-401D	MW-402D	MW-404DR	MW-408DR	MW-502D	MW-505D	MW-600	MW-601	MW-602	MW-603
		Sample Date	1/14/2015	1/14/2015	1/14/2015	1/12/2015	1/13/2015	1/13/2015	1/14/2015	1/14/2015	1/14/2015	1/29/2015	1/13/2015	1/15/2015	1/13/2015	1/29/2015	1/14/2015	1/13/2015	1/14/2015	1/15/2015	1/15/2015	1/15/2015	1/14/2015	1/14/2015	1/13/2015	1/13/2015
		Sample Type	N	DUP-03	N	N	N	N	N	DNAPL	N	N	N	N	N	N	N	N	N	N	DNAPL	N	N	N	N	DNAPL
Field Parameters	**Type 1 RRS**	**Units**																								
Specific Conductivity	--	mS/cm	0.252	0.252	0.529	0.614	0.196	0.524	0.224	--	0.711	0.604	0.545	0.448	0.635	0.457	0.513	0.615	0.450	1.31	--	0.434	0.257	0.529	0.613	--
Dissolved Oxygen	--	mg/L	0.33	0.33	0.77	0.42	2.08	1.29	1.72	--	7.73	0.23	0.57	0.32	0.21	2.64	1.33	0.44	3.19	0.84	--	0.29	0.18	0.28	0.62	--
Oxidation-Reduction Potential	--	mV	-11.2	-11.2	113.4	63.9	-22.3	-16.1	69.3	--	42.6	-58.2	-4.2	-47.1	10.7	1.9	-41.9	193.1	-41.7	-103.5	--	-67.0	-71.3	-42.8	-33.0	--
pH	--	pH units	5.46	5.46	5.84	6.06	6.13	6.13	6.28	--	8.29	6.09	5.69	6.04	5.94	6.43	6.17	6.0	6.06	6.29	--	6.07	6.10	5.92	5.77	--
Temperature	--	deg C	12.40	12.40	16.00	17.30	15.50	16.50	15.60	--	12.40	18.17	15.50	14.60	19.10	19.53	14.70	16.20	15.30	13.70	--	15.70	17.90	15.80	17.40	--
Turbidity	--	NTU	1.47	1.47	1.55	2.97	0.35	1.74	1.70	--	8.75	24.8	1.24	0.94	3.61	4.28	5.05	6.44	2.84	20.1	--	9.80	53.0	3.12	15.5	--
MNA																										
Carbon dioxide	--	mg/L	251	259	236	--	59.7	196	81.2	--	319	--	168	305	--	--	95.9	144	253	137	--	499	--	--	--	--
Iron, as Ferrous (Fe+2)	--	mg/L	6.66	7.79 H	< 0.100	--	< 0.100	< 0.100	< 0.100	--	< 0.100	--	6.83	32.7	--	--	< 0.100	< 0.100	< 0.100	3.85	--	23.4	--	--	--	--
Methane	--	µg/L	3,000	3,700	< 4	--	< 4	< 4	< 4	--	7	--	150	6,700	--	--	< 4	< 4	< 4	6,600	--	9,800	--	--	--	--
Nitrate as N	--	mg/L	< 0.25	< 0.25	0.70	--	0.63	0.31	0.51	--	< 0.25	--	< 0.25	< 0.25	--	--	0.74	1.5	< 0.25	< 0.25	--	< 0.25	--	--	--	--
Oxygen	--	mg/L	3.02 H	5.98 H	7.50	--	8.02	8.27	9.08	--	9.41	--	7.89	7.48	--	--	9.09	7.79	8.96	7.78	--	7.58	--	--	--	--
Sulfate	--	mg/L	< 1.0	< 1.0	87	--	24	56	13	--	6.8	--	< 1.0	< 1.0	--	--	130	56	78	< 1.0	--	< 1.0	--	--	--	--
VOCs																										
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	< 50	< 25,000	< 5,000	< 50	--
Benzene	5	µg/L	**3,500**	**3,600**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	**27**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	**25,000**	**6,900**	< 5.0	--
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 2,500	< 500	< 5.0	--
Ethylbenzene	700	µg/L	**930**	**990**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	**13**	< 2,500	**960**	< 5.0	--
Methylene chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 2,500	< 500	< 5.0	--
Toluene	1,000	µg/L	**720**	**740**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	**8,500**	**2,100**	< 5.0	--
Trichloroethene	5	µg/L	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 5.0	< 5.0	--	< 5.0	< 2,500	< 500	< 5.0	--
Xylenes	10,000	µg/L	**940**	**980**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	**9.6**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	**6.8**	**2,600**	**1,900**	< 5.0	--
SVOCs																										
Acenaphthene	2,000	µg/L	**69**	**73**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	< 0.50	< 0.50	< 0.50	**31**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	< 0.50	**14**	**12**	**1.6**	--
Acenaphthylene	10	µg/L	**1.7**	**3.3**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	< 1.0	**120**	**45**	< 1.0	--
Anthracene	10	µg/L	**1.5**	**1.9**	**0.092**	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.051**	**0.087**	**0.54**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**2.4**	**4.4**	**0.10**	--
Benzo(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.38**	< 0.050	< 0.050	--
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.075**	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	**0.051**	**0.30**	< 0.050	< 0.050	--
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	**0.28**	< 0.10	< 0.10	--
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**0.12**	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	**0.11**	**0.16**	< 0.10	< 0.10	--
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.068**	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.085**	< 0.050	< 0.050	--
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.30**	< 0.050	< 0.050	--
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**0.13**	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	**0.11**	< 0.10	< 0.10	< 0.10	--
Fluoranthene	1,000	µg/L	**0.26**	**0.35**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	**0.11**	**0.40**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	**1.2**	**0.49**	< 0.10	--
Fluorene	1,000	µg/L	**18**	**23**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	**4.4**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	**20**	**36**	**0.22**	--
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.13**	--	< 0.050	< 0.050	< 0.050	**0.064**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	**0.10**	**0.11**	< 0.050	< 0.050	--
Naphthalene	20	µg/L	**3,700**	**4,900**	< 0.50	< 0.50	**2.8**	**2.7**	< 0.50	--	**1.8**	< 0.50	< 0.50	**27**	< 0.50	< 0.50	**5.1**	< 0.50	**3.3**	< 0.50	--	**4.2**	**5,400**	**6,500**	< 0.50	--
Phenanthrene	10	µg/L	**11**	**14**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**3.2**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**15**	**17**	< 0.050	--
Pyrene	1,000	µg/L	**0.23**	**0.32**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	**0.11**	**0.42**	< 0.050	**0.079**	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**1.8**	**0.47**	< 0.050	--
Inorganics					--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.006	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	--	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.429**	--	< 0.0500	< 0.0500	< 0.0500	< 0.0500	--
Barium	2	mg/L	**0.231**	**0.236**	**0.0824**	**0.0854**	**0.0300**	**0.0536**	**0.0758**	--	**0.201**	**0.323**	**0.0888**	**0.324**	**0.377**	**0.0712**	**0.0847**	**0.0768**	**0.0678**	**0.448**	--	**0.342**	**0.157**	**0.275**	**0.491**	--
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0358**	< 0.0050	< 0.0050	< 0.0050	--	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	**0.0312**	< 0.0100	**0.0221**	--
Cyanide	0.2	mg/L	< 0.010	**0.012**	**0.020**	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	**0.022**	< 0.010	--
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--
Nickel	0.1	mg/L	< 0.0200	< 0.0200	**0.0275**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	**0.0687**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Vanadium	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.0607**	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.0747**	< 0.0200	< 0.0200	< 0.0200	**0.0312**	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0387**	< 0.0200	< 0.0200	< 0.0200	--	**0.0202**	**0.208**	**0.0379**	**0.165**	--

Notes:
N = Normal sample
DUP = Duplicate sample
DNAPL - Well not sampled due to presence of DNAPL
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-4
Groundwater Analytical Results for Saprolite Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-214	MW-306SAP	MW-307SAP	MW-310SAP	MW-311	MW-401SAP	MW-401SAP
		Sample Date	13-Jan-15	14-Jan-15	13-Jan-15	13-Jan-15	15-Jan-15	29-Jan-15	29-Jan-15
		Sample Type	N	N	N	N	N	N	DUP-06
Field Parameters	**Type 1 RRS**	**Units**							
Specific Conductivity	--	mS/cm	0.226	1.390	0.564	0.458	0.426	0.286	0.286
Dissolved Oxygen	--	mg/L	0.45	1.21	0.37	0.33	0.43	1.97	1.97
Oxidation-Reduction Potential	--	mV	-73.5	-23.2	34.3	174.7	-111.5	98.6	98.6
pH	--	pH units	6.51	6.06	6.06	5.61	6.24	5.94	5.94
Temperature	--	deg C	16.60	15.40	17.60	16.50	13.90	7.50	17.92
Turbidity	--	NTU	2.19	12.8	0.39	0.77	8.61	0.84	0.84
MNA									
Carbon dioxide	--	mg/L	108	--	--	61.1	329	65.5	60.4
Iron, as Ferrous (Fe+2)	--	mg/L	2.56	--	--	< 0.100	4.15	< 0.100	< 0.100
Methane	--	µg/L	410	--	--	< 4	410	< 4	< 4
Nitrate as N	--	mg/L	< 0.25	--	--	9.8	< 0.25	2.6	2.4
Oxygen	--	mg/L	7.17 H	--	--	7.96 H	7.2 H	8.44 H	8.45 H
Sulfate	--	mg/L	< 1.0	--	--	24	< 1.0	43	41
VOCs									
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**370**	< 5.0	< 5.0
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**94**	< 5.0	< 5.0
Methylene chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**9.6**	< 5.0	< 5.0
Trichloroethene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**19**	**20**
Xylenes	10,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**41**	< 5.0	< 5.0
SVOCs									
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	**13**	< 0.50	< 0.50
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**3.2**	< 1.0	< 1.0
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.56**	< 0.050	< 0.050
Benzo(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**5.5**	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Naphthalene	20	µg/L	< 0.50	**0.66**	< 0.50	< 0.50	**560**	< 0.50	< 0.50
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**3.3**	< 0.050	< 0.050
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Inorganics									
Antimony	0.006	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0200	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Barium	2	mg/L	**0.338**	**0.648**	**0.0649**	**0.0749**	**0.185**	**0.0576**	**0.0566**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.010	< 0.0100	**0.0117**	< 0.0100	< 0.0100	< 0.0100
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	< 0.010	**0.010**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.00036**	**0.00034**
Nickel	0.1	mg/L	< 0.0200	**0.151**	< 0.0200	**0.336**	< 0.0200	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-5
Groundwater Analytical Results for Transition Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-306TZ	MW-306TZ
		Sample Date	1/13/2015	1/13/2015
		Sample Type	N	DUP-01
Field Parameters	**Type 1 RRS**	**Units**		
Specific Conductivity	--	mS/cm	0.729	0.729
Dissolved Oxygen	--	mg/L	0.20	0.20
Oxidation-Reduction Potentia	--	mV	-84.9	-84.9
pH	--	pH units	6.61	6.61
Temperature	--	deg C	19.6	19.6
Turbidity	--	NTU	1.03	1.03
MNA				
Carbon dioxide	--	mg/L	--	--
Iron, as Ferrous (Fe+2)	--	mg/L	--	--
Methane	--	µg/L	--	--
Nitrate as N	--	mg/L	--	--
Oxygen	--	mg/L	--	--
Sulfate	--	mg/L	--	--
VOCs				
Acetone	4,000	µg/L	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0
Methylene chloride	5	µg/L	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0
Trichloroethene	5	µg/L	< 5.0	< 5.0
Xylenes	10,000	µg/L	**6.8**	**6.3**
SVOCs				
Acenaphthene	2,000	µg/L	**18**	**21**
Acenaphthylene	10	µg/L	< 1.0	< 1.0
Anthracene	10	µg/L	**0.25**	**0.25**
Benzo(a)anthracene	0.1	µg/L	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050
Chrysene	0.2	µg/L	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	**0.12**	**0.13**
Fluorene	1,000	µg/L	**2.0**	**2.2**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050
Naphthalene	20	µg/L	**240**	**300**
Phenanthrene	10	µg/L	**0.95**	**1.1**
Pyrene	1,000	µg/L	**0.11**	**0.12**
Inorganics				
Antimony	0.006	mg/L	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500
Barium	2	mg/L	**0.735**	**0.741**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100
Copper	1.3	mg/L	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100
Mercury	0.002	mg/L	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	< 0.0100	< 0.0100
Zinc	2	mg/L	< 0.0200	< 0.0200

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-6
Groundwater Analytical Results for Bedrock Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

Location ID			MW-213	MW-306BR	MW-307BR	MW-307BR	MW-308BR	MW-308BR	MW-309BR	MW-310BR	MW-313	MW-315	MW-315	MW-318	MW-319	MW-320	MW-321	MW-324	MW-325	MW-500BR	MW-503BR	MW-504BR	MW-506BR	MW-507BR	MW-508BR	MW-509BR	MW-510BR	MW-511BR	MW-512BR	MW-513BR
Sample Date			1/13/2015	1/14/2015	1/15/2015	1/15/2015	1/29/2015	1/29/2015	1/29/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/14/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/15/2015	1/14/2015	1/15/2015	1/15/2015	1/15/2015	1/15/2015	1/14/2015	1/14/2015	1/14/2015	1/14/2015
Sample Type			N	N	DUP-4	N	N	DUP-05	N	N	N	N	DUP-02	N	N	N	N	N	N	N	N	N	Destroyed	N	N	N	N	N	N	N
Field Parameters	**Type 1 RRS**	**Units**																												
Specific Conductivity	--	mS/cm	0.650	0.495	--	--	--	--	0.167	0.248	0.173	0.616	0.616	0.710	0.408	0.114	0.146	0.061	0.093	0.213	0.074	0.160	--	0.230	2.10	0.205	0.203	0.274	0.632	0.650
Dissolved Oxygen	--	mg/L	0.33	0.50	--	--	--	--	0.47	1.16	0.74	0.61	0.61	0.53	0.52	5.35	1.94	0.55	0.65	0.69	0.39	0.43	--	2.24	1.93	0.49	0.43	0.68	0.57	0.75
Oxidation-Reduction Potential	--	mV	-80.2	-131.3	--	--	--	--	-113.5	-34.9	-39.2	-74.7	-74.7	-86.5	-126.6	-37.8	-37.6	-36.3	-89.1	-21.6	-31.9	-60.6	--	-114.7	-228.6	-124.0	-135.7	-109.8	-101.9	-14.1
pH	--	pH units	6.14	7.12	--	--	--	--	5.97	7.13	8.69	6.51	6.51	8.33	6.99	9.14	9.66	6.56	8.96	10.24	5.95	9.49	--	8.98	12.05	9.48	6.72	10.35	7.08	6.03
Temperature	--	deg C	15.2	15.4	--	--	--	--	17.8	16.7	13.9	18.6	18.6	14.9	17.4	10.5	15.3	17.2	15.5	11.7	15.3	13.1	--	15.2	11.2	12.8	11.7	11.3	15.5	13.7
Turbidity	--	NTU	3.31	3.42	--	--	--	--	2.92	9.42	10.4	1.06	1.06	1.02	4.11	0.44	1.05	0.91	1.54	1.82	2.27	4.63	--	3.06	1.86	3.99	4.82	20.6	2.01	8.89
MNA																														
Carbon dioxide	--	mg/L	--	--	--	--	--	--	47.3	--	73.8	77.9	69.2	172	174	--	--	--	--	--	< 10.0	--	--	56.6	< 10.0	47.1	--	--	269	--
Iron, as Ferrous (Fe+2)	--	mg/L	--	--	--	--	--	--	0.119	--	< 0.100	6.36	6.53	0.995	0.364	--	--	--	--	--	< 0.500	--	--	< 0.100	< 0.100	< 0.100	--	--	< 0.100	--
Methane	--	µg/L	--	--	--	--	--	--	120	--	240	60	57	2,800	< 4	--	--	--	--	--	8	--	--	< 4	500	980	--	--	4,900	--
Nitrate as N	--	mg/L	--	--	--	--	--	--	< 0.25	--	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	--	--	--	--	--	< 0.25	--	--	0.61	< 0.25	< 0.25	--	--	< 0.25	--
Oxygen	--	mg/L	--	--	--	--	--	--	8.46	--	7.42	7.68 H	7.01	7.29	8.5	--	--	--	--	--	7.73	--	--	8.16	8.17	8.68	--	--	8.00	--
Sulfate	--	mg/L	--	--	--	--	--	--	< 1.0	--	1.1	5.5	4.9	< 1.0	22	--	--	--	--	--	6.7	--	--	38	4.5	4.6	--	--	22	--
VOCs																														
Acetone	4,000	µg/L	< 50	< 50	< 5,000	< 5,000	< 2500	< 2500	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 5,000	< 50	< 50	--	< 50	< 50	< 50	< 50	< 50	< 50	< 50
Benzene	5	µg/L	**8,900**	< 5.0	**12,000**	**12,000**	**6,600**	**6,100**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1,400**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13,000**	**35**	< 5.0	--	< 5.0	< 5.0	**2,500**	**1,100**	**450**	< 5.0	< 5.0
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0	< 500	< 500	< 250	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	**1,500**	< 5.0	**2,100**	**2,000**	**810**	**720**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1,200**	< 5.0	< 5.0	--	< 5.0	< 5.0	**260**	**180**	**17**	< 5.0	< 5.0
Methylene chloride	5	µg/L	< 5.0	< 5.0	< 500	< 500	< 250	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	**460**	< 5.0	< 500	< 500	**2,100**	**1,900**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	**12**	< 5.0	--	< 5.0	< 5.0	**460**	**190**	**35**	< 5.0	< 5.0
Trichloroethene	5	µg/L	< 5.0	< 5.0	< 500	< 500	< 250	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes	10,000	µg/L	**1,300**	< 5.0	**770**	**720**	**880**	**740**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**610**	< 5.0	< 5.0	--	< 5.0	< 5.0	**160**	**200**	**12**	< 5.0	< 5.0
SVOCs																														
Acenaphthene	2,000	µg/L	**180**	**5.3**	**220**	**220**	**46**	**46**	< 0.50	< 0.50	< 0.50	**0.56**	**0.65**	**37**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	**86**	< 0.50	< 0.50	--	< 0.50	< 0.50	**16**	**7.8**	**3.3**	**2.5**	**1.3**
Acenaphthylene	10	µg/L	**180**	< 1.0	< 1.0	< 1.0	**66**	**63**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.2**	< 1.0	< 1.0	--	< 1.0	< 1.0	**8.0**	**2.7**	< 1.0	< 1.0	< 1.0
Anthracene	10	µg/L	**7.9**	**0.062**	**6.6**	**7.2**	**7.0**	**7.5**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.81**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**1.6**	< 0.050	< 0.050	--	< 0.050	< 0.050	**0.91**	**0.86**	**0.081**	**0.051**	**0.082**
Benzo(a)anthracene	0.1	µg/L	< 0.50	< 0.050	**0.15**	**0.20**	**9.6**	**9.9**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**0.17**	< 0.050	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**11**	**11**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**0.13**	< 0.050	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**10**	**10**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	**0.13**	< 0.10	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**5.9**	**6.2**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**3.3**	**3.2**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Chrysene	0.2	µg/L	< 0.050	< 0.050	**0.11**	**0.13**	**7.8**	**8.3**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**0.14**	< 0.050	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**1.1**	**1.2**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	**1.3**	< 0.10	**3.1**	**3.5**	**12**	**12**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**0.51**	< 0.10	< 0.10	--	< 0.10	< 0.10	**0.45**	**0.78**	< 0.10	< 0.10	< 0.10
Fluorene	1,000	µg/L	**51**	**0.59**	**46**	**48**	**22**	**21**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**4.6**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**14**	< 0.10	< 0.10	--	< 0.10	< 0.10	**6.5**	**4.7**	**0.89**	**0.28**	< 0.10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**4.8**	**4.9**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	**0.072**	**0.067**	< 0.050	**0.058**	< 0.050	**0.081**	< 0.050
Naphthalene	20	µg/L	**14,000**	< 0.50	**8,100**	**6,700**	**3,400**	**3,200**	< 0.50	**7.6**	< 0.50	< 0.50	< 0.50	**920**	< 0.50	**13**	**5.7**	**5.3**	< 0.50	**2,800**	< 0.50	**0.65**	--	< 0.50	< 0.50	**810**	**300**	**150**	< 0.50	< 0.50
Phenanthrene	10	µg/L	**52**	< 0.050	**44**	**46**	**28**	**29**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**4.5**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**12**	< 0.050	**0.088**	--	< 0.050	< 0.050	**7.9**	**5.6**	**0.76**	< 0.050	< 0.050
Pyrene	1,000	µg/L	**1.3**	< 0.050	**3.6**	**4.1**	**17**	**19**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.59**	< 0.050	< 0.050	--	< 0.050	< 0.050	**0.52**	**0.97**	**0.055**	< 0.050	< 0.050
Inorganics																														
Antimony	0.006	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	--	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Barium	2	mg/L	**0.927**	**0.535**	**0.826**	**0.804**	**1.11**	**1.15**	**0.143**	**0.142**	**0.141**	**0.455**	**0.459**	**0.551**	**0.642**	**0.0287**	**0.0606**	**0.0232**	**0.0553**	**0.364**	< 0.0200	**0.184**	--	**0.0698**	**0.614**	**0.128**	**0.109**	**0.0678**	**0.154**	**0.711**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	**0.0090**	< 0.0050	< 0.0050	< 0.0050	--	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	**0.0137**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.0348**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	**0.014**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.021**	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.0802**	**0.0746**	**0.0472**	**0.0508**	< 0.0200	< 0.0200	**0.0564**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0205**	**0.0573**	**0.0686**	**0.0378**	**0.121**	--	< 0.0200	< 0.0200	**0.109**	**0.0939**	< 0.0200	< 0.0200	**0.0224**

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-7
Detections and RRS Exceedances in the Alluvium Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	4	0	--	0	--
Arsenic	0.05	4	1	0.222	1	MW-408S
Barium	2	4	4	0.0777 - 0.444	0	--
Beryllium	0.004	4	0	--	0	--
Cadmium	0.005	4	1	0.0153	1	MW-501S
Chromium	0.1	4	0	--	0	--
Copper	1.3	4	0	--	0	--
Cyanide	0.2	4	0	--	0	--
Lead	0.015	4	0	--	0	--
Mercury	0.002	4	0	--	0	--
Nickel	0.1	4	0	--	0	--
Selenium	0.05	4	0	--	0	--
Thallium	0.002	4	0	--	0	--
Vanadium	0.2	4	0	--	0	--
Zinc	2	4	0	--	0	--
Semi Volatile Organic Compounds (µg/L)						
Acenaphthene	2000	4	0	--	0	--
Acenaphthylene	10	4	0	--	0	--
Anthracene	10	4	0	--	0	--
Benzo(a)anthracene	0.1	4	0	--	0	--
Benzo(a)pyrene	0.2	4	0	--	0	--
Benzo(b)fluoranthene	0.2	4	0	--	0	--
Benzo(g,h,i)perylene	10	4	0	--	0	--
Benzo(k)fluoranthene	10	4	0	--	0	--
Chrysene	0.2	4	0	--	0	--
Dibenzo(a,h)anthracene	0.3	4	0	--	0	--
Fluoranthene	1000	4	1	0.26	0	--
Fluorene	1000	4	1	0.40	0	--
Indeno(1,2,3-cd)pyrene	0.4	4	0	--	0	--
Naphthalene	20	4	1	5.0	0	
Phenanthrene	10	4	0	--	0	--
Pyrene	1000	4	2	0.064 - 0.096	0	--
Volatile Organic Compounds (µg/L)						
Acetone	4000	4	0	--	0	--
Benzene	5	4	1	35	1	MW-501S
Carbon Disulfide	4000	4	0	--	0	--
Ethylbenzene	700	4	1	5.3	0	--
Methylene Chloride	5	4	0	--	0	--
Toluene	1000	4	1	7.4	0	--
Trichloroethylene	5	4	0	--	0	--
Xylenes, total	10000	4	0	--	0	--

Created by: JM

Checked by: NGV

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 3-8
Detections and RRS Exceedances in the Galliard Formation Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	20	0	--	0	--
Arsenic	0.05	20	1	0.429	1	MW-408DR
Barium	2	20	20	0.0300 - 0.491	0	--
Beryllium	0.004	20	0	--	0	--
Cadmium	0.005	20	1	0.0358	1	MW-401D
Chromium	0.1	20	0	--	0	--
Copper	1.3	20	2	0.0221 - 0.0312	0	--
Cyanide	0.2	20	3	0.012 - 0.022	0	--
Lead	0.015	20	0	--	0	--
Mercury	0.002	20	0	--	0	--
Nickel	0.1	20	1	0.0275	0	--
Selenium	0.05	20	1	0.0687	1	MW-207
Thallium	0.002	20	0	--	0	--
Vanadium	0.2	20	1	0.0607	0	--
Zinc	2	20	7	0.0202 - 0.208	0	--
Semi Volatile Organic Compounds (µg/L)						
Acenaphthene	2000	20	5	1.6 - 73	0	--
Acenaphthylene	10	20	3	1.7 - 120	2	MW-600, -601
Anthracene	10	20	8	0.051 - 4.4	0	--
Benzo(a)anthracene	0.1	20	1	0.38	1	MW-600
Benzo(a)pyrene	0.2	20	3	0.051 - 0.3	1	MW-600
Benzo(b)fluoranthene	0.2	20	1	0.28	1	MW-600
Benzo(g,h,i)perylene	10	20	3	0.11 - 0.16	0	--
Benzo(k)fluoranthene	10	20	2	0.068 - 0.085	0	--
Chrysene	0.2	20	1	0.30	1	MW-600
Dibenzo(a,h)anthracene	0.3	20	2	0.11 - 0.13	0	--
Fluoranthene	1000	20	5	0.11 - 1.2	0	--
Fluorene	1000	20	5	0.22 - 36	0	--
Indeno(1,2,3-cd)pyrene	0.4	20	4	0.064 - 0.13	0	--
Naphthalene	20	20	10	1.8 - 6,500	4	MW-12, -304, -600, -601
Phenanthrene	10	20	4	3.2 - 17	3	MW-12, -600, -601
Pyrene	1000	20	6	0.079 - 1.8	0	--
Volatile Organic Compounds (µg/L)						
Acetone	4000	20	0	--	0	--
Benzene	5	20	4	27 - 25,000	4	MW-12, -304, -600, -601
Carbon Disulfide	4000	20	0	--	0	--
Ethylbenzene	700	20	3	13 - 990	2	MW-12, -601
Methylene Chloride	5	20	0	--	0	--
Toluene	1000	20	3	720 - 8,500	2	MW-600, -601
Trichloroethylene	5	20	2	18	2	MW-21, -401D
Xylenes, total	10000	20	5	6.8 - 2,600	0	--

Created by: JM

Checked by: TEN

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

DNAPL was observed in MW-205 and MW-502D; therefore, they were not sampled

Table 3-9
Detections and RRS Exceedances in the Saprolite Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	6	0	--	0	--
Arsenic	0.05	6	0	--	0	--
Barium	2	6	6	0.0566 - 0.648	0	--
Beryllium	0.004	6	0	--	0	--
Cadmium	0.005	6	0	--	0	--
Chromium	0.1	6	1	0.0117	0	--
Copper	1.3	6	0	--	0	--
Cyanide	0.2	6	1	0.010	0	--
Lead	0.015	6	0	--	0	--
Mercury	0.002	6	1	0.00036	0	--
Nickel	0.1	6	2	0.151 - 0.336	2	MW-306SAP and MW-310SAP
Selenium	0.05	6	0	--	0	--
Thallium	0.002	6	0	--	0	--
Vanadium	0.2	6	0	--	0	--
Zinc	2	6	0	--	0	--
Semi Volatile Organic Compounds (ug/L)						
Acenaphthene	2000	6	1	13	0	--
Acenaphthylene	10	6	1	3.2	0	--
Anthracene	10	6	1	0.56	0	--
Benzo(a)anthracene	0.1	6	0	--	0	--
Benzo(a)pyrene	0.2	6	0	--	0	--
Benzo(b)fluoranthene	0.2	6	0	--	0	--
Benzo(g,h,i)perylene	10	6	0	--	0	--
Benzo(k)fluoranthene	10	6	0	--	0	--
Chrysene	0.2	6	0	--	0	--
Dibenzo(a,h)anthracene	0.3	6	0	--	0	--
Fluoranthene	1000	6	0	--	0	--
Fluorene	1000	6	1	5.5	0	--
Indeno(1,2,3-cd)pyrene	0.4	6	0	--	0	--
Naphthalene	20	6	2	0.66 - 560	1	MW-311
Phenanthrene	10	6	1	3.3	0	--
Pyrene	1000	6	0	--	0	--
Volatile Organic Compounds (ug/L)						
Acetone	4000	6	0	--	0	--
Benzene	5	6	1	370	1	MW-311
Carbon Disulfide	4000	6	0	--	0	--
Ethylbenzene	700	6	1	94	0	--
Methylene Chloride	5	6	0	--	0	--
Toluene	1000	6	1	9.6	0	--
Trichloroethylene	5	6	1	20	1	MW-401SAP
Xylenes, total	10000	6	1	41	0	--

Created by: JM

Checked by: TEN

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 3-10
Detections and RRS Exceedances in the Transition Zone Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	1	0	--	0	--
Arsenic	0.05	1	0	--	0	--
Barium	2	1	1	0.741	0	--
Beryllium	0.004	1	0	--	0	--
Cadmium	0.005	1	0	--	0	--
Chromium	0.1	1	0	--	0	--
Copper	1.3	1	0	--	0	--
Cyanide	0.2	1	0	--	0	--
Lead	0.015	1	0	--	0	--
Mercury	0.002	1	0	--	0	--
Nickel	0.1	1	0	--	0	--
Selenium	0.05	1	0	--	0	--
Vanadium	0.2	1	0	--	0	--
Zinc	2	1	0	--	0	--
Thallium	0.002	1	0	--	0	--
Semi Volatile Organic Compounds (ug/L)						
Acenaphthene	2000	1	1	21	0	--
Acenaphthylene	10	1	0	--	0	--
Anthracene	10	1	1	0.25	0	--
Benzo(a)anthracene	0.1	1	0	--	0	--
Benzo(a)pyrene	0.2	1	0	--	0	--
Benzo(b)fluoranthene	0.2	1	0	--	0	--
Benzo(g,h,i)perylene	10	1	0	--	0	--
Benzo(k)fluoranthene	10	1	0	--	0	--
Chrysene	0.2	1	0	--	0	--
Dibenzo(a,h)anthracene	0.3	1	0	--	0	--
Fluoranthene	1000	1	1	0.13	0	--
Fluorene	1000	1	1	2.2	0	--
Indeno(1,2,3-cd)pyrene	0.4	1	0	--	0	--
Naphthalene	20	1	1	300	1	MW-306TZ
Phenanthrene	10	1	1	1.1	0	--
Pyrene	1000	1	1	0.12	0	--
Volatile Organic Compounds (ug/L)						
Acetone	4000	1	0	--	0	--
Benzene	5	1	0	--	0	--
Carbon Disulfide	4000	1	0	--	0	--
Ethylbenzene	700	1	0	--	0	--
Methylene Chloride	5	1	0	--	0	--
Toluene	1000	1	0	--	0	--
Trichloroethylene	5	1	0	--	0	--
Xylenes, total	10000	1	1	6.3	0	--

Created by: JM

Checked by: NGV

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 3-11
Detections and RRS Exceedances in the Bedrock Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	24	0	--	0	--
Arsenic	0.05	24	0	--	0	--
Barium	2	24	24	0.0232 - 1.15	0	--
Beryllium	0.004	24	0	--	0	--
Cadmium	0.005	24	1	0.0090	1	MW-325
Chromium	0.1	24	1	0.0137	0	--
Copper	1.3	24	2	0.0214 - 0.0348	0	--
Cyanide	0.2	24	2	0.014 - 0.021	0	--
Lead	0.015	24	0	--	0	--
Mercury	0.002	24	0	--	0	--
Nickel	0.1	24	0	--	0	--
Selenium	0.05	24	0	--	0	--
Thallium	0.002	24	0	--	0	--
Vanadium	0.2	24	0	--	0	--
Zinc	2	24	11	0.0205 - 0.121	0	--
Semi Volatile Organic Compounds (ug/L)						
Acenaphthene	2000	24	12	0.56 - 220	0	--
Acenaphthylene	10	24	5	1.2 - 180	2	MW-213 and MW-308BR
Anthracene	10	24	11	0.051 - 7.9	0	--
Benzo(a)anthracene	0.1	24	3	0.15 - 9.9	3	MW-307BR, -308BR, -510BR
Benzo(a)pyrene	0.2	24	2	0.13 - 11	1	MW-308BR
Benzo(b)fluoranthene	0.2	24	2	0.13 - 10	1	MW-308BR
Benzo(g,h,i)perylene	10	24	1	6.2	0	--
Benzo(k)fluoranthene	10	24	1	3.3	0	--
Chrysene	0.2	24	3	0.11 - 8.3	1	MW-308BR
Dibenzo(a,h)anthracene	0.3	24	1	1.2	1	MW-308BR
Fluoranthene	1000	24	7	0.45 - 12	0	--
Fluorene	1000	24	10	0.28 - 51	0	--
Indeno(1,2,3-cd)pyrene	0.4	24	5	0.058 - 4.9	1	MW-308BR
Naphthalene	20	24	13	0.65 - 14,000	8	MW-213, -307BR, -308BR, -318, -500BR, -509BR, 510BR, -511BR
Phenanthrene	10	24	9	0.088 - 52	4	MW-213, -307BR, -308BR, 500BR
Pyrene	1000	24	7	0.055 - 19	0	--
Volatile Organic Compounds (ug/L)						
Acetone	4000	24	0	--	0	--
Benzene	5	24	9	35 - 13,000	9	MW-213, -307BR, -308BR, -318, -500BR, -503BR, -509BR, -510BR, -511BR.
Carbon Disulfide	4000	24	0	--	0	--
Ethylbenzene	700	24	7	17 - 2,100	4	MW-213, -307BR, -308BR, 500BR
Methylene Chloride	5	24	0	--	0	--
Toluene	1000	24	6	12 - 2,100	1	MW-308BR
Trichloroethylene	5	24	0	--	0	--
Xylenes, total	10000	24	8	12 - 1,300	0	--

Created by: JM

Checked by: TEN

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 5-1
Treatment System Effluent Sample Results
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Sample ID Sample Date Unit	Effluent Concentration Limit (ug/L)	Effluent 9/3/2014	Effluent 10/10/2014	Effluent 11/4/2014	Effluent 12/9/2014	Effluent 2/5/2015	Effluent 3/6/2015	Effluent 4/3/2015
Volatile Organic Compounds									
Benzene	µg/L	5530	64	< 5.0	< 5.0	46	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/L	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/L	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes, total	µg/L	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Semivolatile Organic Compounds									
Bis(2-ethylhexyl)phthalate	µg/L	--	--	**--**	< 10	**--**	**--**	< 10	--
Inorganic Compound Results									
Antimony	µg/L	NE	< 60	< 60	< 60	< 60	< 60	< 60	< 60
Barium	µg/L	NE	643	306	603	669	80.5	811	755
Chromium	µg/L	1740	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chromium (hexavalent compounds)	mg/L	1740	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Copper	µg/L	380	< 25	< 25	< 25	< 25	< 25	< 25	< 25
Nickel	µg/L	400	< 20	< 20	< 20	< 20	< 20	< 20	< 20
pH	SU	6-11*	6.74	8.60	6.66	7.05	9.46	7.23	7.07

Created by: GEJ
Checked by: NGV

Notes:
mg/L - milligram per liter
µg/L - microgram per liter
SU - standard unit
NE - not established

Table 5-2
Extraction Wells Operational Data
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Date	Extraction Well	Reason For Shutdown
September 22, 2014 - October 10, 2014	MW-307BR / MW-308BR	Carbon replacement
December 29, 2014 - January 30, 2015	MW-307BR / MW-308BR	Carbon replacement
January 30, 2015 - Present	MW-308BR	Pump not operational

Table 5-3
Mass Reduction Calculations in Bedrock Groundwater
September 1, 2014 - April 1, 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Extraction Well	Total Volume Extracted (gallons)	Total Volume Extracted (Liters)	Benzene Concentration (µg/L)	Benzene Mass (µg)	Total Benzene Mass Removed 9/1/14 - 4/1/15 (Kg)	Total Benzene Mass Removed from Previous Monitoring Periods (Kg)	Total Benzene Mass Removed from System to Date (Kg)
Benzene							
MW-307BR	630,506	2,386,465	12,000	28,637,582,520	28.64	480.86	509.50
MW-308BR	815,246	3,085,706	6,600	20,365,660,326	20.37	225.41	245.78
	1,445,752	**5,472,171**	--	**49,003,242,846**	**49.00**	**706.27**	**755.27**

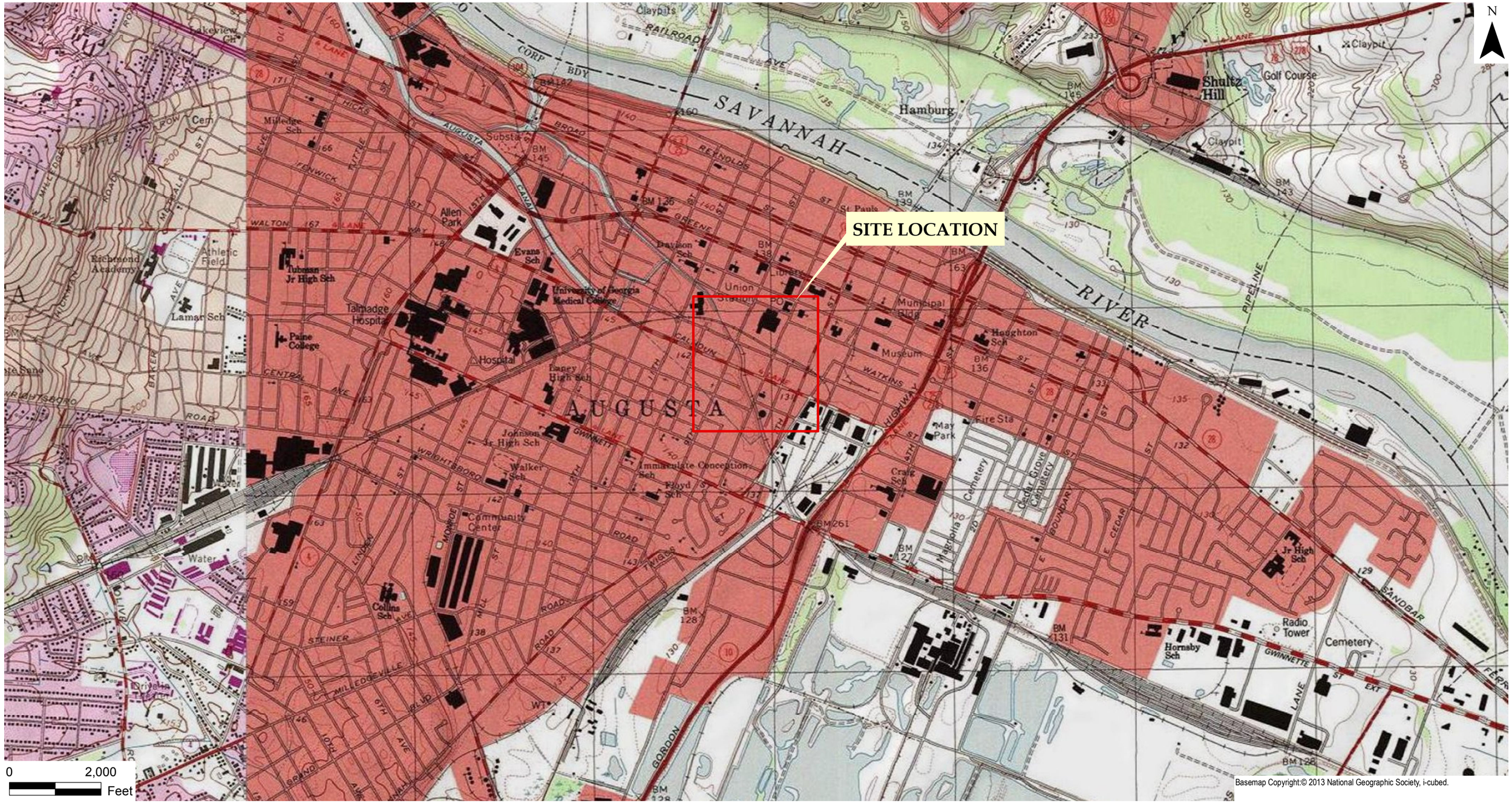
Extraction Well	Total Volume Extracted (gallons)	Total Volume Extracted (Liters)	Naphthalene Concentration (µg/L)	Naphthalene Mass (µg)	Total Naphthalene Mass Removed 9/1/14 - 4/1/15 (Kg)	Total Naphthalene Mass Removed from Previous Monitoring Periods (Kg)	Total Naphthalene Mass Removed from System to Date (Kg)
Naphthalene							
MW-307BR	630,506	2,386,465	8,100	19,330,368,201	19.33	260.82	280.15
MW-308BR	815,246	3,085,706	3,400	10,491,400,774	10.49	175.45	185.94
	1,445,752	**5,472,171**	--	**29,821,768,975**	**29.82**	**436.27**	**466.09**

Notes:
Kg - kilogram
µg/L - micrograms per liter

Figures

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700



Environmental Resources Management

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DATE:	5/7/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F1-1SiteLoc.mxd

FIGURE 1-1
SITE LOCATION MAP

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

CONTOUR INTERVAL 10 FEET

DOTTED LINES REPRESENT
5-FOOT CONTOURS

NATIONAL GEODETIC VERTICAL
DATUM OF 1929

QUADRANGLE LOCATION

ERM

N

MW-319
MW-408S
MW-408D
TELFAIR ST
WALKER ST
MW-320
MW-318
MW-317
MW-315
9TH ST
MW-603
FENWICK ST
MW-513BR
MW-325
8TH ST
MW-501S
MW-404DR
MW-306BR
MW-306 (S,D,SAP,TZ)
MW-502D
MW-512BR
MW-600
MW-511BR
WALTON WAY
MW-323
MW-324
MW-307 (D,SAP,TZ)
MW-321
MW-316
MW-307BR
MW-322
MW-24
MW-21
7TH ST
MW-503BR
MW-504BR
MW-310 (D,SAP,TZ)
MW-402S
MW-310BR
MW-402D
NORTHERN PARCEL
MW-510BR
MW-211
MW-202DR
MW-601
MW-313
MW-509BR
KING ST
MW-19
MW-205
MW-203
MW-308BR
WESTERN PARCEL
MW-213
MW-17
MW-214
MW-401S
MW-22
MW-401D
MW-401SAP
TAYLOR ST
MW-311
MW-500BR
MW-12
MW-25
SOUTHERN PARCEL
MW-206
MW-508BR
MW-207
MW-506BR
MW-05
MW-309 (D,SAP,TZ)
MW-309BR
MW-505D
MW-304
MW-303
MW-507BR
MW-602

0 200 Feet

- Alluvium Monitoring Well
- Galliard Monitoring Well
- Saprolite Monitoring Well
- Bedrock Monitoring Well
- Bedrock Recovery Well
- Destroyed Alluvium Monitoring Well
- Destroyed Bedrock Monitoring Well
- Depth Discrete Sampling Port
- Parcels
- ISS (*In-Situ* Solidification) Area
- ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
Depth discrete sampling port may contain up to four tubes within its well casing that are screened at different depth intervals (Alluvium = S, Galliard = D, Saprolite = SAP and Transition = TZ)

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FILE:	S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F2-1MWNtwk.mxd				

FIGURE 2-1
GROUNDWATER MONITORING WELL NETWORK

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408S
(124.96)

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

WALTON WAY

MW-501S
(125.60)

MW-306S
(124.58)

MW-402S
(123.27)

MW-17
(127.22)

MW-401S
(126.70)

MW-05

126

125

124

127

NORTHERN
PARCEL

WESTERN
PARCEL

0 200 Feet

(127.22) Groundwater Elevation (Feet MSL)

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Parcels

ISS (In Situ Solidification)

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

*MW-408S was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSACAER_F3-1GWElevAlluvium.mxd

FIGURE 3-1
GROUNDWATER ELEVATION MAP FOR THE ALLUVIUM
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408DR* (124.67)

TELFAIR ST

WALKER ST

9TH ST

MW-603 (124.30)

FENWICK ST

8TH ST

MW-404DR (125.60)

WALTON WAY

MW-502D (124.19)

MW-306D (124.18)

MW-600 (125.21)

MW-307D (124.67)

MW-24 (123.74)

7TH ST

MW-21 (121.66)

MW-310D (124.39)

MW-402D (124.23)

NORTHERN PARCEL

MW-211 (NM)

MW-202DR (124.07)

MW-601 (124.00)

KING ST

MW-19 (127.71)

WESTERN PARCEL

MW-205 (124.02)

MW-203 (123.95)

MW-22 (123.92)

MW-401D (124.20)

TAYLOR ST

MW-12 (123.88)

MW-25 (123.77)

SOUTHERN PARCEL

MW-206 (123.94)

MW-207 (126.65)

MW-309D (123.51)

MW-505D (123.68)

MW-304 (123.08)

MW-303 (123.23)

MW-602 (122.70)

125 126 127 124 123 122

0 200 Feet

(123.10) Groundwater Elevation (Feet MSL)

(NM) Not Measured

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Galliard Monitoring Well

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

*MW-408DR was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-2
GROUNDWATER ELEVATION MAP FOR THE GALLIARD JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

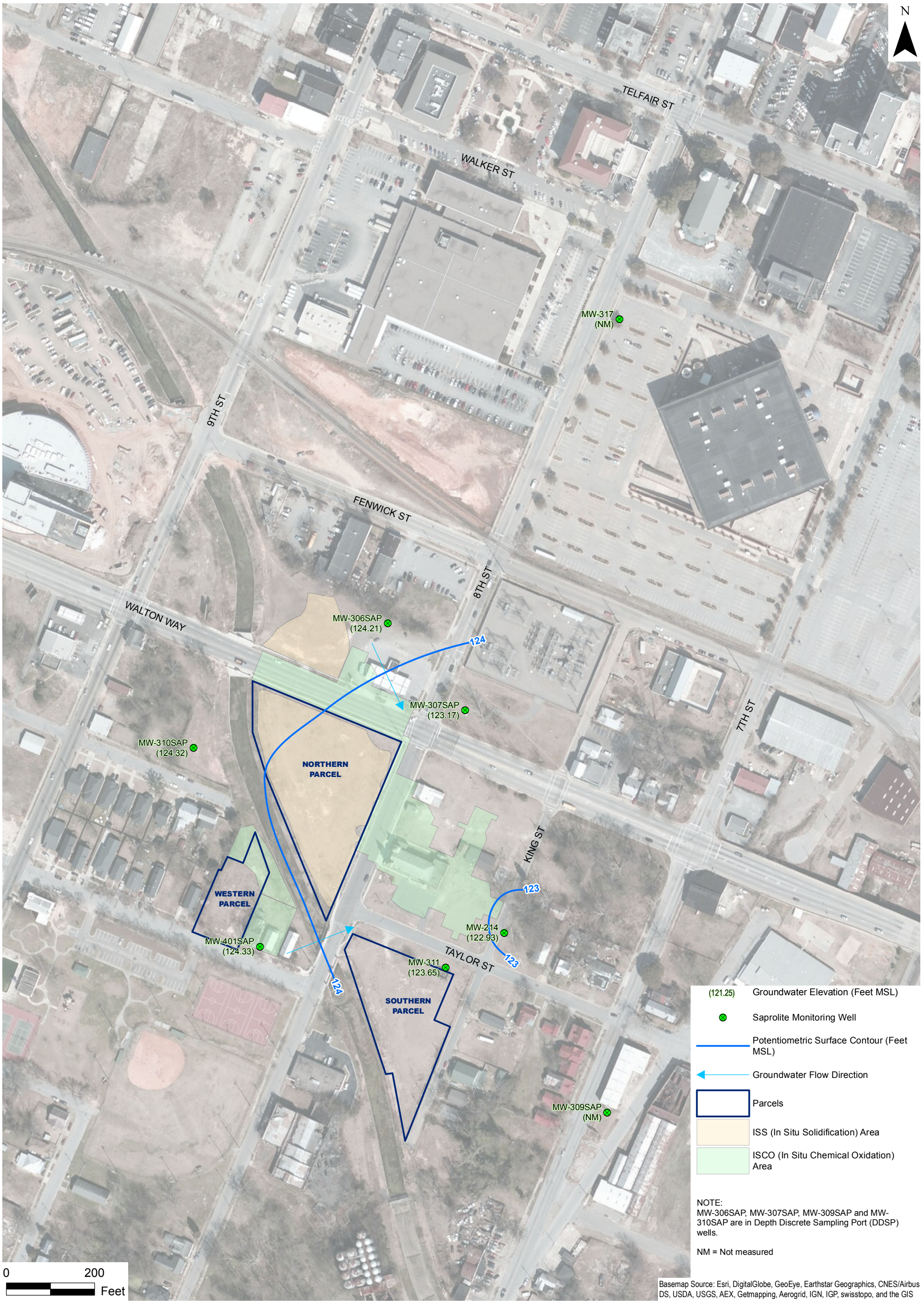

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FIGURE 3-3
GROUNDWATER ELEVATION MAP FOR THE SAPROLITE
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-319 (124.08)

124

TELFAIR ST

WALKER ST

MW-320 (123.24)

123

MW-318 (123.28)

124

MW-315 (123.97)

9TH ST

122

MW-513BR (123.54)

MW-325 (121.29)

FENWICK ST

8TH ST

WALTON WAY

MW-306BR (123.77)

MW-306TZ (123.84)

MW-512BR (123.86)

MW-511BR (123.84)

MW-323 (122.85)

MW-307TZ (NM)

MW-324 (123.22)

MW-503BR (123.90)

MW-321 (123.27)

MW-316 (123.31)

MW-307BR

MW-322 (123.33)

MW-504BR (123.89)

7TH ST

MW-310BR* (129.98)

MW-310TZ (NM)

NORTHERN PARCEL

MW-510BR (123.76)

MW-313 (122.49)

MW-509BR (123.78)

KING ST

WESTERN PARCEL

MW-308BR

MW-213 (123.15)

TAYLOR ST

MW-500BR (123.82)

SOUTHERN PARCEL

MW-508BR (123.31)

123

MW-506BR

MW-309TZ (NM)

MW-309BR (122.24)

122

MW-507BR (121.88)

0 200 Feet

(122.49) Groundwater Elevation (Feet MSL)

Bedrock Monitoring Well

Bedrock Recovery Well

Transition Well

Destroyed Bedrock Monitoring Well

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

NM = Not measured

Dashed where inferred

* MW-310BR is an anomalous point and was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-4
GROUNDWATER POTENTIAL MAP FOR THE BEDROCK AND TRANSITION WELLS - JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408S

MW-408S	RESULT
Arsenic	0.222

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

MW-501S

MW-501S	RESULT
Benzene	35
Cadmium	0.0153

MW-306S
NS

WALTON WAY

MW-402S
NE

NORTHERN PARCEL

WESTERN PARCEL

MW-17
NS

MW-401S
NE

SOUTHERN PARCEL

MW-05

Well ID	RESULT
Constituent	Concentration

NE No Type 1 RRS Exceedances

NS Not Sampled

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

Organic constituents are reported in ug/L. Inorganic constituents are reported in mg/L.

0 200 Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-5
TYPE I RRS EXCEEDANCES FOR THE ALLUVIUM WELLS JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408DR

MW-408DR	RESULT
Arsenic	0.429

TELFAIR ST

WALKER ST

9TH ST

MW-603 DNAPL

FENWICK ST

8TH ST

MW-404DR NE

WALTON WAY

MW-502D DNAPL

MW-306D NE

MW-600

MW-600	RESULT
Benzene	25,000
Toluene	8,500
Acenapthylene	120
Benzo(a)anthracene	0.38
Benzo(a)pyrene	0.30
Benzo(b)fluoranthene	0.28
Chrysene	0.30
Naphthalene	5,400
Phenanthrene	15

MW-24 NS

MW-307D NE

MW-21

MW-21	RESULT
Trichloroethylene	18

7TH ST

MW-310D NS

MW-402D NE

MW-601	RESULT
Benzene	6,900
Ethylbenzene	960
Toluene	2,100
Acenapthylene	45
Naphthalene	6,500
Phenanthrene	17

MW-211 NS

MW-202DR NE

MW-601

KING ST

MW-19 NE

WESTERN PARCEL

MW-205 DNAPL

MW-203 NE

MW-401D	RESULT
Trichloroethylene	18
Cadmium	0.0358

MW-401D

MW-22 NE

TAYLOR ST

MW-12	RESULT
Benzene	3,600
Ethylbenzene	990
Naphthalene	4,900
Phenanthrene	14

MW-12

MW-25 NS

MW-206 NE

MW-207	RESULT
Selenium	0.0687

MW-207

MW-309D NS

MW-505D NE

MW-304

MW-304	RESULT
Benzene	27
Naphthalene	27

MW-303 NE

MW-602 NE

Well ID	RESULT
Constituent	Concentration

NE — No Type 1 RRS Exceedances

NS — Not Sampled

DNAPL — Dense non-aqueous phase liquid present

Galliard Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

Organic constituents are reported in ug/L.

0 200 Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-6
TYPE I RRS EXCEEDANCES FOR THE GALLIARD FORMATION WELLS - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

WALTON WAY

7TH ST

KING ST

TAYLOR ST

MW-317
NS

MW-306SAP

MW-306SAP	RESULT
Nickel	0.151

MW-307SAP
NE

MW-310SAP

MW-310SAP	RESULT
Nickel	0.336

NORTHERN PARCEL

WESTERN PARCEL

MW-401SAP

MW-401SAP	RESULT
Trichloroethylene	20

MW-311

MW-311	RESULT
Benzene	370
Naphthalene	560

NE
MW-214

MW-309SAP
NS

Well ID	RESULT
Constituent	Concentration

NE No Type 1 RRS Exceedances

NS Not Sampled

Saprolite Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306SAP, MW-307SAP, MW-309SAP and MW-310SAP are in Depth Discrete Sampling Port (DDSP) wells.

Organic constituents are reported in ug/L. Inorganic constituents are reported in mg/L.

0 200 Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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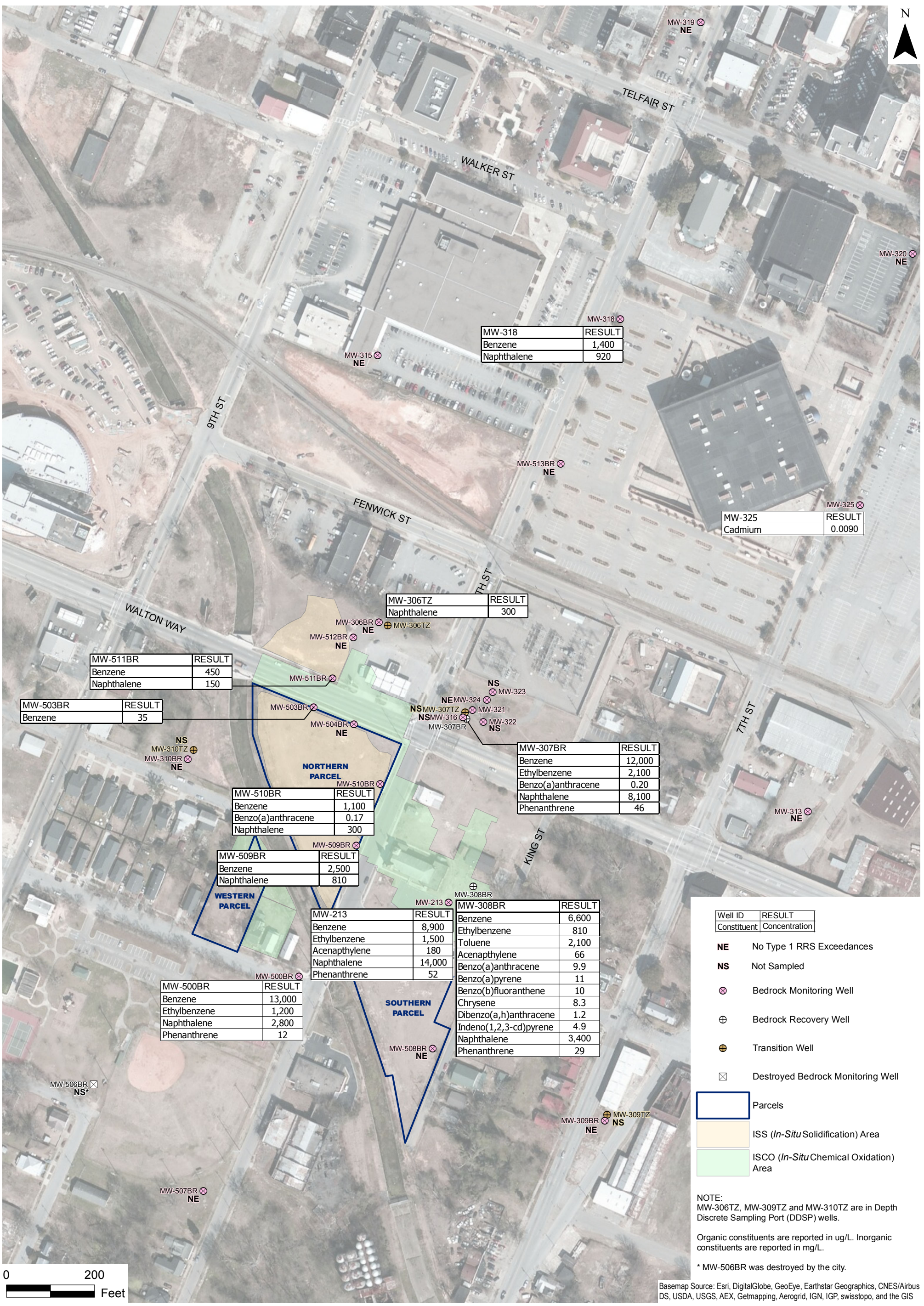
FIGURE 3-7
TYPE I RRS EXCEEDANCES FOR THE SAPROLITE WELLS
JANUARY 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM



MW-318	RESULT
Benzene	1,400
Naphthalene	920

MW-325	RESULT
Cadmium	0.0090

MW-306TZ	RESULT
Naphthalene	300

MW-511BR	RESULT
Benzene	450
Naphthalene	150

MW-503BR	RESULT
Benzene	35

MW-307BR	RESULT
Benzene	12,000
Ethylbenzene	2,100
Benzo(a)anthracene	0.20
Naphthalene	8,100
Phenanthrene	46

MW-510BR	RESULT
Benzene	1,100
Benzo(a)anthracene	0.17
Naphthalene	300

MW-509BR	RESULT
Benzene	2,500
Naphthalene	810

MW-213	RESULT
Benzene	8,900
Ethylbenzene	1,500
Acenapthylene	180
Naphthalene	14,000
Phenanthrene	52

MW-308BR	RESULT
Benzene	6,600
Ethylbenzene	810
Toluene	2,100
Acenapthylene	66
Benzo(a)anthracene	9.9
Benzo(a)pyrene	11
Benzo(b)fluoranthene	10
Chrysene	8.3
Dibenzo(a,h)anthracene	1.2
Indeno(1,2,3-cd)pyrene	4.9
Naphthalene	3,400
Phenanthrene	29

MW-500BR	RESULT
Benzene	13,000
Ethylbenzene	1,200
Naphthalene	2,800
Phenanthrene	12

Well ID	RESULT
Constituent	Concentration

NE No Type 1 RRS Exceedances

NS Not Sampled

Bedrock Monitoring Well

Bedrock Recovery Well

Transition Well

Destroyed Bedrock Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

Organic constituents are reported in ug/L. Inorganic constituents are reported in mg/L.

* MW-506BR was destroyed by the city.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

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FIGURE 3-8
TYPE I RRS EXCEEDANCES FOR THE BEDROCK AND TRANSITION WELLS - JANUARY 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

WALTON WAY

7TH ST

KING ST

TAYLOR ST

(<5.0)
(<0.50)
MW-408DR

20
100
1,000

5
100

DNAPL
MW-603

(<5.0)
(3.3)
MW-404DR

DNAPL
MW-502D

(<5.0)
(<0.50)
MW-306D

(25,000)
(5,400)
MW-600

10K
10K

(<5.0)
(<0.50)
MW-307D

NS
MW-24

(<5.0)
(<0.50)
MW-21

NS
MW-310D

(<5.0)
(<0.50)
MW-402D

NORTHERN PARCEL

NS
MW-211

(6,900)
(6,500)
MW-601

(<5.0)
(2.7)
MW-202DR

(<5.0)
(<0.50)
MW-19

DNAPL
MW-205

(<5.0)
(<0.50)
MW-203

WESTERN PARCEL

1,000

(<5.0)
(5.1)
MW-401D

(<5.0)
(2.8)
MW-22

(3,600)
(4,900)
MW-12

NS
MW-25

SOUTHERN PARCEL

MW-206

(<5.0)
(<0.50)
MW-207

(<5.0)
(1.8)

NS
MW-309D

(<5.0)
(4.2)
MW-505D

(27)
(27)
MW-304

(<5.0)
(<0.50)
MW-303

20
5

(<5.0)
(<0.50)
MW-602

0 200 Feet

(<5.0) Benzene Concentration (ug/L)

(<0.50) Naphthalene Concentration (ug/L)

NS Not Sampled

DNAPL Dense non-aqueous phase liquid present

Galliard Monitoring Well

Benzene Isoconcentration Contour (ug/L - Dashed where inferred)

Naphthalene Isoconcentration Contour (ug/L - Dashed where inferred)

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

DNAPL = Dense non-aqueous phase liquid

NS = Not Sampled

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

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FIGURE 3-9
BENZENE AND NAPHTHALENE ISOCONCENTRATION MAP FOR THE GALLIARD FORMATION - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST
WALKER ST
9TH ST
FENWICK ST
WALTON WAY
8TH ST
7TH ST
KING ST
TAYLOR ST

MW-319 (<5.0) (<0.50)
MW-320 (<5.0) (13)
MW-318 (1,400) (920)
MW-315 (<5.0) (<0.50)
MW-513BR (<5.0) (<0.50)
MW-325 (<5.0) (<0.50)
MW-306BR (<5.0) (<0.50)
MW-306TZ (<5.0) (300)
MW-512BR (<5.0) (<0.50)
MW-511BR (450) (150)
MW-503BR (35) (<0.50)
MW-504BR (<5.0) (0.65)
MW-323 (<5.0) (5.3)
MW-324 NS
MW-307TZ NS
MW-316 NS
MW-321 (<5.0) (5.7)
MW-322 NS
MW-307BR (12,000) (8,100)
MW-310TZ NS
MW-310BR (<5.0) (<0.50)
MW-510BR (1,100) (300)
MW-509BR (2,500) (810)
MW-213 (8,900) (14,000)
MW-308BR (6,600) (3,400)
MW-500BR (13,000) (2,800)
MW-508BR (<5.0) (<0.50)
MW-506BR
MW-507BR (<5.0) (<0.50)
MW-309BR (<5.0) (<0.50)
MW-309TZ NS
MW-313 (<5.0) (<0.50)

NORTHERN PARCEL
WESTERN PARCEL
SOUTHERN PARCEL

Benzene isoconcentration contours: 5, 20, 100, 1K, 1,000, 10,000
Naphthalene isoconcentration contours: 20, 100, 1K, 10,000

0 200 Feet

(<5.0) Benzene Concentration (ug/L)
(<0.50) Naphthalene Concentration (ug/L)
NS Not Sampled
DNAPL Dense non-aqueous phase liquid present
Bedrock Monitoring Well
Bedrock Recovery Well
Transition Well
Destroyed Bedrock Monitoring Well
Benzene Isoconcentration Contour (ug/L) (Dashed where inferred)
Naphthalene Isoconcentration Contour (ug/L) (Dashed where inferred)
Parcels
ISS (*In-Situ* Solidification) Area
ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

NS = Not Sampled

* Deep bedrock well not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-10
BENZENE AND NAPHTHALENE ISOCONCENTRATION MAP FOR THE BEDROCK FORMATION AND TRANSITION WELLS - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408S
NS

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

MW-501S

MW-501S	RESULT
Carbon Dioxide	323
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	< 0.25
Oxygen	8.62
Sulfate	61

MW-306S
NS

WALTON WAY

MW-402S
NS

NORTHERN PARCEL

WESTERN PARCEL

MW-17
NS

MW-401S

MW-401S	RESULT
Carbon Dioxide	168
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	2.5
Oxygen	7.46
Sulfate	62

SOUTHERN PARCEL

MW-05

0 200 Feet

Well ID	RESULT
Constituent	Concentration

NS Not Sampled

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

Constituents are reported in mg/L, except methane. Methane is reported in ug/L.

H = Analyte was prepped or analyzed beyond specified hold time

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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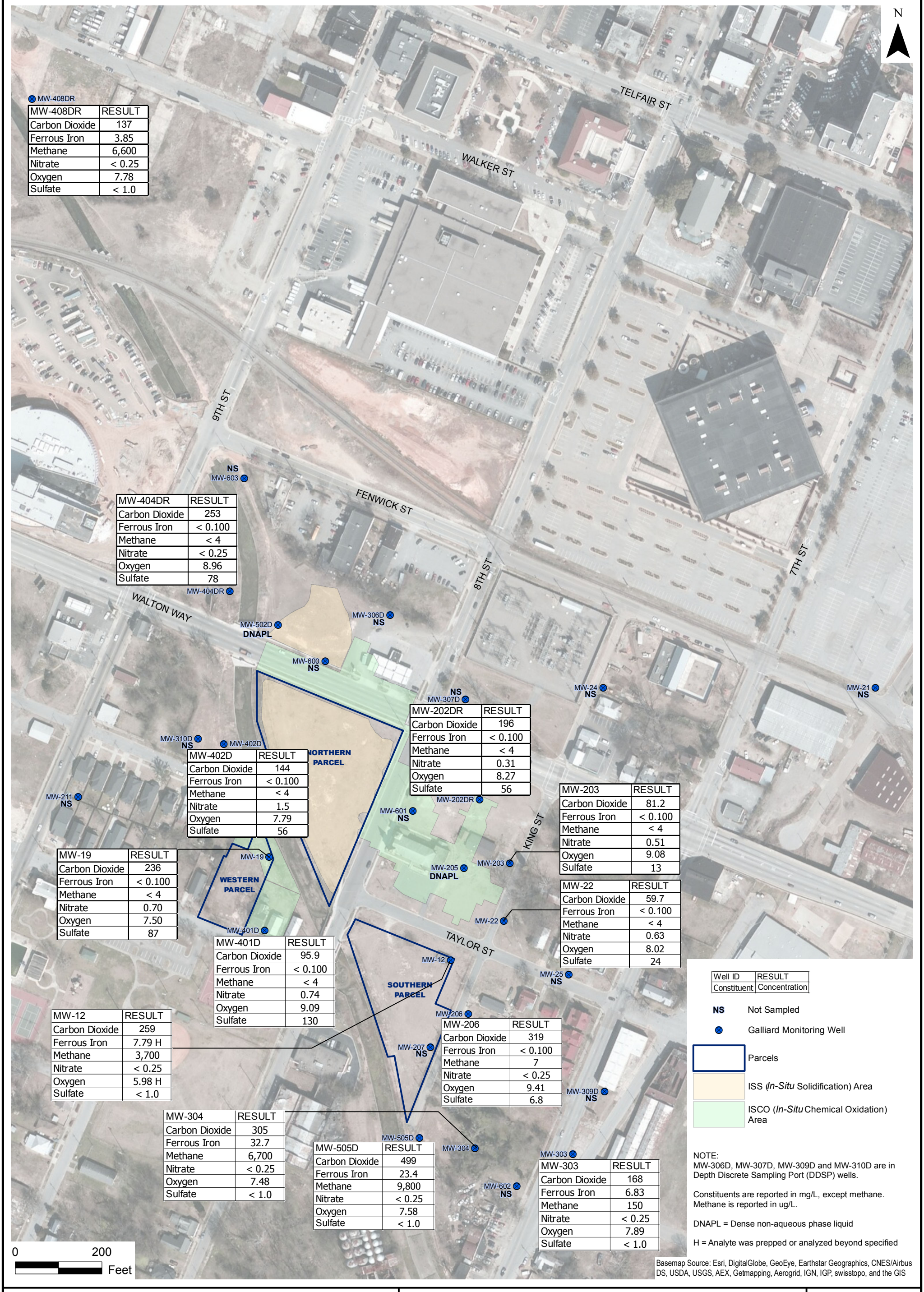
FIGURE 3-11
NATURAL ATTENUATION PARAMETERS IN ALLUVIUM GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM



MW-408DR	RESULT
Carbon Dioxide	137
Ferrous Iron	3.85
Methane	6,600
Nitrate	< 0.25
Oxygen	7.78
Sulfate	< 1.0

MW-404DR	RESULT
Carbon Dioxide	253
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	< 0.25
Oxygen	8.96
Sulfate	78

MW-202DR	RESULT
Carbon Dioxide	196
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.31
Oxygen	8.27
Sulfate	56

MW-402D	RESULT
Carbon Dioxide	144
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	1.5
Oxygen	7.79
Sulfate	56

MW-203	RESULT
Carbon Dioxide	81.2
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.51
Oxygen	9.08
Sulfate	13

MW-19	RESULT
Carbon Dioxide	236
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.70
Oxygen	7.50
Sulfate	87

MW-22	RESULT
Carbon Dioxide	59.7
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.63
Oxygen	8.02
Sulfate	24

MW-401D	RESULT
Carbon Dioxide	95.9
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.74
Oxygen	9.09
Sulfate	130

MW-12	RESULT
Carbon Dioxide	259
Ferrous Iron	7.79 H
Methane	3,700
Nitrate	< 0.25
Oxygen	5.98 H
Sulfate	< 1.0

MW-206	RESULT
Carbon Dioxide	319
Ferrous Iron	< 0.100
Methane	7
Nitrate	< 0.25
Oxygen	9.41
Sulfate	6.8

MW-304	RESULT
Carbon Dioxide	305
Ferrous Iron	32.7
Methane	6,700
Nitrate	< 0.25
Oxygen	7.48
Sulfate	< 1.0

MW-505D	RESULT
Carbon Dioxide	499
Ferrous Iron	23.4
Methane	9,800
Nitrate	< 0.25
Oxygen	7.58
Sulfate	< 1.0

MW-303	RESULT
Carbon Dioxide	168
Ferrous Iron	6.83
Methane	150
Nitrate	< 0.25
Oxygen	7.89
Sulfate	< 1.0

Well ID	RESULT
Constituent	Concentration

NS Not Sampled

Galliard Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

Constituents are reported in mg/L, except methane. Methane is reported in ug/L.

DNAPL = Dense non-aqueous phase liquid

H = Analyte was prepped or analyzed beyond specified

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F3-12NatAtnGalliard.mxd

FIGURE 3-12
NATURAL ATTENUATION PARAMETERS IN GALLIARD FORMATION GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

WALTON WAY

TAYLOR ST

MW-317
NS

MW-306SAP
NS

MW-307SAP
NS

MW-309SAP
NS

MW-310SAP

MW-310SAP	RESULT
Carbon Dioxide	61.1
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	9.8
Oxygen	7.96 H
Sulfate	24

NORTHERN PARCEL

WESTERN PARCEL

MW-214

MW-214	RESULT
Carbon Dioxide	108
Ferrous Iron	2.56
Methane	410
Nitrate	< 0.25
Oxygen	7.17 H
Sulfate	< 1.0

MW-401SAP

MW-401SAP	RESULT
Carbon Dioxide	65.5
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	2.6
Oxygen	8.45 H
Sulfate	43

MW-311

MW-311	RESULT
Carbon Dioxide	329
Ferrous Iron	4.15
Methane	410
Nitrate	< 0.25
Oxygen	7.2 H
Sulfate	< 1.0

0 200 Feet

Well ID	RESULT
Constituent	Concentration

NS Not Sampled

Saprolite Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306SAP, MW-307SAP, MW-309SAP and MW-310SAP are in Depth Discrete Sampling Port (DDSP) wells.

Constituents are reported in mg/L, except methane. Methane is reported in ug/L.

H = Analyte was prepped or analyzed beyond specified

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

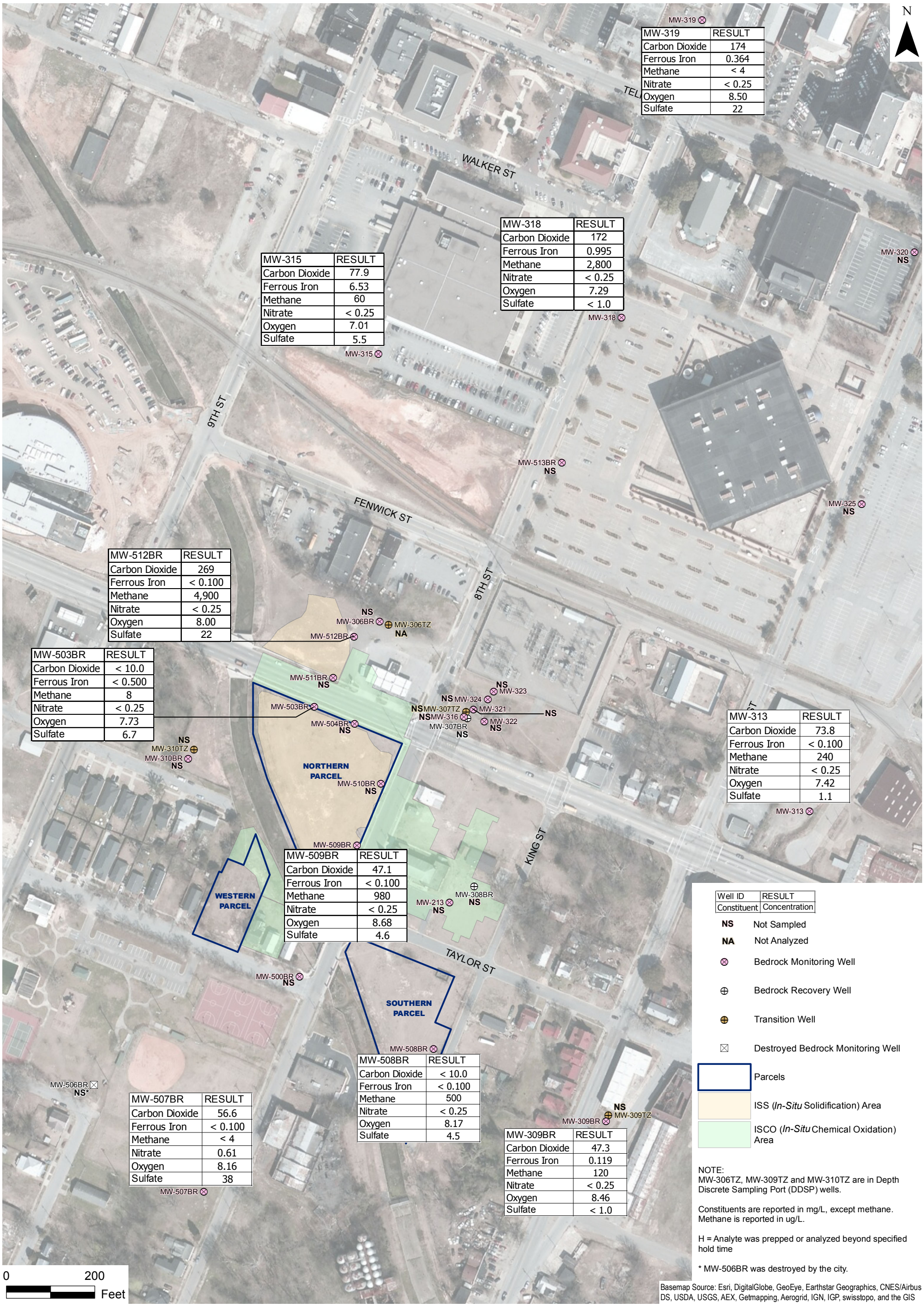
FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F3-13NatAtnSaprolite.mxd

FIGURE 3-13
NATURAL ATTENUATION PARAMETERS IN SAPROLITE GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM



Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0
FILE:	S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F3-14NatAtnBdrkTZ.mxd				

FIGURE 3-14
NATURAL ATTENUATION PARAMETERS IN BEDROCK AND TRANSITION WELLS GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

Groundwater Sampling Log Sheets

Appendix A

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta | Sampler's Name: W. Virges

Well ID: MW-12 | Pump Type/Model: Peristaltic | Sample Collection Time: 1423

Total Depth (ft)[1]: 30' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 7.48' | Pump Intake Depth (ft): ~25' | Sample ID: MW-12-20150114-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1345 / 1420 | QA/QC Collected? (YES) NO

Well Volume (gal) = 0.041d²h: 3.7gal / 14 L | Purge Rate (L/min)[2]: ~ | QA/QC I.D. DUP-03-20150114-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.5L | Laboratory Analyses: COI / MNAs

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1355	13.3	0.246	0.79	5.73	-4.9	3.11	1	7.51	Strong odor coming from well
1400	13.7	0.249	0.52	5.64	-7.5	1.56	1.5	7.51	
1405	14.2	0.259	1.54	5.56	-11.6	6.26	2	7.52	
1410	12.9	0.257	0.65	5.47	-9.7	6.57	2.5	7.52	
1415	12.7	0.253	0.31	5.46	-10.1	1.98	3	7.52	
1420	12.4	0.252	0.33	5.46	-11.2	1.47	3.5	7.53	
	Well Parameters Stable @						1420		
	Well Sampled @					1423			
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Auguste | Sampler's Name: M. Virgo

Well ID: MW-19 | Pump Type/Model: Peristaltic | Sample Collection Time: 1645

Total Depth (ft)[1]: 19.7 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.2 L/min

Depth to Water (ft): 12.42 | Pump Intake Depth (ft): ~17 | Sample ID: MW-19-20150114-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1530 / 1643 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.2gal / 4.5L | Purge Rate (L/min)[2]: ~0.1 - 0.25L/min | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 16.75L | Laboratory Analyses: COI / MNA

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1540	13.4	0.475	2.31	5.90	57.5	1.47	1	12.74	
1558	16.6	0.495	1.63	5.88	80.9	3.79	5.5	13.44	Vol1 Excessive Drawdown
1616 ~~1616~~	15.7	0.527	1.07	5.87	100.2	2.97	10	13.46	Vol2 3 well volumes
1634 ~~1634~~	16.2	0.522	0.82	5.84	109.7	2.34	14.5	13.43	Vol3 Purged
1637	16.4	0.532	0.80	5.84	110.7	1.75	15.25	13.43	
1640	16.5	0.530	0.78	5.84	111.5	1.91	16	13.43	Purge Rate increased
1643	16.0	0.529	0.77	5.84	113.4	1.55	16.75	13.43	to ~0.25mL/min
	Well Parameters Stable ✓						1643		
	Well Sampled ✓				1645				
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AbL | Project No.: | Sampling Date: 1/12/14

Site/Location: Augusta | Sampler's Name: Ryan Mayo He

Well ID: MW-21 | Pump Type/Model: Peristaltic | Sample Collection Time: 1110

Total Depth (ft)[1]: ~~28~~ 27.9 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 6.92 | Pump Intake Depth (ft): 27.5 | Sample ID: MW-21-20150112-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1035 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: 3.35 | Purge Rate (L/min)[2]: 0.025 | QA/QC I.D. ~~MW-21-2015-01~~ ~~FB-01~~

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 1.25 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1035	16.5	627	2.81	6.12	122.1	4.03	—	6.92	
1040	16.9	626	1.36	6.01	108.8	3.96	.125	6.92	
1045	17.1	619	1.01	6.01	96.3	3.27	.25	6.92	
1050	17.2	619	0.73	6.03	84.6	3.15	.375	6.92	
1055	17.6	615	0.56	6.04	77.3	3.06	.875	6.92	
1100	17.4	615	0.46	6.05	69.2	3.02	1.0	6.92	
1105	17.4	613	0.43	6.05	65.2	3.00	1.125	6.92	
1110	17.3	614	0.42	6.06	63.9	2.97	1.25	6.92	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-22 | Pump Type/Model: Pegasus | Sample Collection Time: 15:55

Total Depth (ft)[1]: 22.3 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 5.72 | Pump Intake Depth (ft): 19.5 | Sample ID: MW-22-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 15:20 – 15:50 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.7(GAL) 10.1(L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
15:25	16.2	201.5	3.18	6.17	-20.2	.97	1.0	5.78	
15:30	16.3	199.6	2.16	6.16	-20.6	.84	2.0	5.78	
15:35	16.0	196.7	2.18	6.15	-20.9	.77	3.0	5.78	
15:40	15.7	196.2	2.13	6.15	-21.4	.33	4.0	5.78	
15:45	15.4	195.7	2.06	6.14	-22.1	.33	5.0	5.78	
15:50	15.5	195.6	2.08	6.13	-22.3	.35	6.0	5.78	
15:55									Sampling @ 15:55
									11 Containers
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-202DR | Pump Type/Model: Pegasus | Sample Collection Time: 14:25

Total Depth (ft)[1]: 29.5 | Tubing Material: Poly 3/4 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 7.60 | Pump Intake Depth (ft): 25.00 | Sample ID: MW-202DR-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 13:50 – 14:20 | QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 3.6 (GAL) 13.5 (L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D. ———

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 | Laboratory Analyses:

Well Condition: Good

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
13:55	16.7	522.9	4.54	6.17	-6.8	2.15	1.0	7.60	
14:00	16.7	521.7	3.70	6.18	-8.3	2.11	2.0	7.60	
14:05	16.5	521.1	3.41	6.17	-11.0	2.14	3.0	7.60	
14:10	16.4	523.4	1.91	6.13	-12.7	2.07	4.0	7.60	
14:15	16.6	523.1	1.85	6.14	-14.8	1.98	5.0	7.60	
14:20	16.5	523.6	1.29	6.13	-16.1	1.74	6.0	7.60	
14:25									Sampling @ 14:25
									11 Containers
Stabilizing Criteria[5]	✓ +/- 1°C	✓ +/- 3%	✓ +/- 10% (see note below)[7]	✓ +/- 0.1 unit	✓ +/- 10 mV (see note below)[8]	✓ +/- 10% or <10 NTUs	✓ (see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-203 | Pump Type/Model: PERISTALTIC/Regusus Alexis | Sample Collection Time: 1550

Total Depth (ft)[1]: 26 | Tubing Material: POLY/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 6.85 | Pump Intake Depth (ft): 20 | Sample ID: MW-203-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1515/1650 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1525	15.4	0.264	2.15	6.36	31.4	3.31	0.5	6.86	
1530	15.8	0.237	1.82	6.31	44.5	2.35	1.0	6.86	
1535	15.9	0.224	1.81	6.31	54.3	1.40	1.5	6.85	
1540	15.4	0.223	1.64	6.29	59.9	1.55	2.0	6.85	
1545	15.6	0.224	1.72	6.28	69.3	1.70	2.5	6.85	
1550	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

* 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL Project No.: _____ Sampling Date: 1-15-15

Site/Location: Augusta Sampler's Name: A. NEAL / WILL V.

Well ID: MW-205 Pump Type/Model: _____ Sample Collection Time: _____

Total Depth (ft)[1]: 28.1 Tubing Material: _____ Sample Purge Rate (L/min)[3]: _____

Depth to Water (ft): _____ Pump Intake Depth (ft): _____ Sample ID: _____

Well Diameter (in): 2 Start/Stop Purge Time: _____ QA/QC Collected? _____

Well Volume (gal) = $0.041d^2h$: _____ Purge Rate (L/min)[2]: _____ QA/QC I.D. _____

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): _____ Laboratory Analyses: _____

Well Condition: _____ Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☑ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1220	DROPPED BAILER IN WELL, CAME OUT VERY NASTY WITH NAPL; → NOT SAMPLED								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-206 | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 1425

Total Depth (ft)[1]: 27.9 | Tubing Material: POLY / SILICON | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): ~~6.43~~ 6.42 | Pump Intake Depth (ft): ~20 | Sample ID: MW-206-20150117-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1350 / 1500 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: GOOD

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1400	13.3	0.713	7.13	8.32	23.4	9.53	0.5	6.44	
1405	13.1	0.711	7.10	8.33	27.5	5.87	1.0	6.44	
1410	12.6	0.712	8.14	8.35	35.1	7.03	1.5	6.44	
1415	12.6	0.712	7.45	8.34	37.9	9.50	2.0	6.44	
1420	12.4	0.711	7.73	8.29	42.6	8.75	2.5	6.44	
SAMPLE TIME —			1425						
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

* 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AbL | Project No.: | Sampling Date: 1/12/15

Site/Location: Augusta | Sampler's Name: Ryan Mayette

Well ID: MW-207 | Pump Type/Model: Peristaltic | Sample Collection Time: 1220

Total Depth (ft)[1]: 24.6 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): N/A | Pump Intake Depth (ft): 24.3 | Sample ID: MW-207-20150112-0(

Well Diameter (in): 2 | Start/Stop Purge Time: 1145 | QA/QC Collected? NP

Well Volume (gal) = 0.041d²h: N/A | Purge Rate (L/min)[2]: .025 | QA/QC I.D. NP

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Obstruction | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1145	15.9	456.4	1.71	6.12	-47.5	2.86	—	—	Obstruction in well WL Meter
1150	16.6	525.7	0.59	6.06	-53.2	2.59	.125	—	can not pass. Tubing can pass
1155	16.4	524.7	0.47	6.05	-53.6	2.51	.25	—	by obstruction
1200	16.2	521.2	0.40	6.05	-53.6	2.40	.325	—	
1205	16.3	515.1	0.35	6.05	-54.7	2.38	.875	—	
1210	16.4	513.0	0.32	6.05	-56.6	2.31	1.0	—	
1215	16.4	~~513~~ 513.2	0.32	6.05	-56.7	2.20	1.125	—	
1220	16.5	~~513~~ 513.1	0.30	6.05	-56.9	2.17	1.25	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712p LOG2 | Sampling Date: 01-29-2015

Site/Location: Augusta, GA | Sampler's Name: B. Mitchell

Well ID: MW-207 | Pump Type/Model: Peristaltic Geopump | Sample Collection Time: 14:25

Total Depth (ft)[1]: 24.6 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.1 L/min

Depth to Water (ft): 5.50 | Pump Intake Depth (ft): 22.6 | Sample ID: MW-207-29012015-01

Well Diameter (in): 2" | Start/Stop Purge Time: 12:25 / | QA/QC Collected? yes

Well Volume (gal) = 0.041d²h: 3.1 gal / 12L | Purge Rate (L/min)[2]: 0.1 L/min - 0.5 L/min | QA/QC I.D. MS/MSD

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 38.3 L | Laboratory Analyses: COC

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
12:30	16.18	0.627	3.20	5.94	-45.5	340	0.5	6.31	Drawdown > 0.3ft. switch to 3rd vol purge. Increase to 0.5 L/min
12:45									
12:10	18.56	0.385	0.41	6.07	-36.6	124	12L	8.95	1st vol
13:34	19.42	0.500	0.40	6.08	-45.4	66.7	24L	9.86	2nd vol
13:58	19.50	0.589	0.25	6.08	-52.2	27.0	36L	10.24	3rd vol, decrease to 0.1 L/min
14:01	18.95	0.596	0.23	6.08	-54.1	28.0	36.32	9.80	
14:05	18.62	0.598	0.23	6.08	-56.2	25.6	36.82	9.55	
14:10	18.30	0.602	0.23	6.09	-58.7	23.2	37.32	8.97	
14:15	18.58	0.602	0.23	6.10	-59.0	22.3	37.82	8.63	
14:20	18.17	0.604	0.23	6.09	-58.2	24.8	38.32	8.46	pressure stuck; sample
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

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ERM

GROUND WATER SAMPLING LOG SHEET

Client: LALC | Project No.: 0230712-52 | Sampling Date: 01/13/2015

Site/Location: ATHENS, GA | Sampler's Name: A. SHORBEDITS

Well ID: MW-213 | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 11:20

Total Depth (ft)[1]: ~63' bgs | Tubing Material: LDPE 1/4" x 0.17 | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.73 | Pump Intake Depth (ft): 60.0 bgs | Sample ID: MW-213-20150113-01

Well Diameter (in): 2.00 | Start/Stop Purge Time: 09:12/11:11 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 9.01 (34.1L) | Purge Rate (L/min)[2]: 0.1 / 0.4 / 0.1 | QA/QC I.D. N/A.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~31.5 | Laboratory Analyses: COI

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

Method: LOW FLOW (LOW VOLUME) LOW STRESS ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
09:20	12.5	0.574	~~2.56~~ 2.22	7.09	-38.1	18.8	0.3	7.86	Slight odour, yellow tinge.
09:25	13.4	0.650	1.18	6.56	-51.1	7.98	0.8	8.30	
DRAWDOWN > 0.3 ft, SWITCHING TO THREE WELL VOLUMES									
			49				—		
10:50	19.0	0.63	0.~~49~~	6.12	-86.7	5.50	~30	16.10	NOT FEASIBLE TO WAIT FOR
									THREE VOLUMES AND PRODUCE
11:00	16.6	0.65	0.22	6.13	-86.9	2.98	~30.5	15.01	102L OF WASTE, SWITCHING
11:05	15.8	0.64	0.30	6.14	-82.4	3.86	~31.0	14.80	BACK TO LOW FLOW/VOL GIVEN
11:10	15.2	0.65	0.33	6.14	-80.2	3.31	~31.5	14.50	THAT ONE VOLUME HAS BEEN
									REMOVED FROM WELL;
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									WL IS RISING.
Stabilizing Criteria[5]	~~0.02~~ ✓ +/- 1°C	0.02 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	✓ +/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-214 | Pump Type/Model: Peristaltic | Sample Collection Time: 1425

Total Depth (ft)[1]: 56.6 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~.2 L/min

Depth to Water (ft): 6.55 | Pump Intake Depth (ft): ~53 | Sample ID: MW-214-20150113-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1355/1420 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 8.2 gal / 31.1 L | Purge Rate (L/min)[2]: ~0.1 | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 L | Laboratory Analyses: 8260 / MNA

Well Condition: Good | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1405	16.1	0.220	0.85	6.58	-60.3	21.4	1	6.66	Weather: Rainy ~50°F
1410	16.6	0.222	0.67	6.55	-65.0	5.79	1.5	6.67	
1415	16.5	0.226	0.51	6.53	-72.1	2.57	2	6.68	Filled extra MNA
1420	16.6	0.226	0.45	6.51	-73.5	2.19	2.5	6.69	Bottle 250ML
	Well Parameters stable @ 1420								
	Well Sampled @ 1425								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/13/2013

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-303 | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 15:05

Total Depth (ft)[1]: ~30.5 bgs | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 6.13 | Pump Intake Depth (ft): 27.0 bgs | Sample ID: MW-303-20150113-01

Well Diameter (in): 2.0 | Start/Stop Purge Time: 14:26 / 14:55 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 3.97 (15.0L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.4 | Laboratory Analyses: COI & MNA

Well Condition: GOOD

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
14:34	14.5	0.544	1.12	5.72	154.4	10.1	0.3	6.14	
14:39	14.9	0.543	0.71	5.72	45.0	7.9	0.8	6.14	
14:44	15.1	0.542	0.65	5.72	23.4	8.12	1.3	6.14	
14:49	15.4	0.548	0.53	5.70	3.2	3.33	1.8	6.14	
14:54	15.5	0.545	0.57	5.69	-4.2	1.24	2.3	6.14	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									
Stabilizing Criteria[5]	✓ +/- 1°C	0.018 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-15-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-304 | Pump Type/Model: Pegasus | Sample Collection Time: 12:15

Total Depth (ft)[1]: 36.0 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 8.45 | Pump Intake Depth (ft): 31.00 | Sample ID: MW-304-20150115-01

Well Diameter (in): 2 | Start/Stop Purge Time: 11:40 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.5 (GAL) 17. (L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D.: —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
11:45	15.0	450.7	.63	6.05	-40.3	3.74	1.0	8.51	
11:50	14.6	447.1	.41	6.06	-42.2	1.27	2.0	8.53	
11:55	14.8	448.0	.35	6.04	-43.9	1.12	3.0	8.53	
12:00	14.5	448.4	.33	6.04	-46.3	1.06	4.0	8.53	
12:05	14.6	448.1	.32	6.04	-47.0	1.04	5.0	8.53	
12:10	14.6	448.3	.32	6.04	-47.1	.94	6.0	8.53	
12:15									Sampling @ 12:15
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AbL
Project No.:
Sampling Date: 1/14/15
Site/Location: Augusta, GA
Sampler's Name: R. Mayette

Well ID: MW-306BR
Pump Type/Model: Perista/Hz
Sample Collection Time: 1050
Total Depth (ft)[1]: 73.25
Tubing Material: Poly
Sample Purge Rate (L/min)[3]: .025
Depth to Water (ft): 8.02
Pump Intake Depth (ft): 73.0
Sample ID: MW-306BR-20150114-01
Well Diameter (in): 6
Start/Stop Purge Time: 1010
QA/QC Collected? N/A
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: .025
QA/QC I.D. N/A
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 1.0
Laboratory Analyses:
Well Condition: Good

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1015	11.8	353.9	3.34	6.97	-83.1	4.21	.125	8.03	
1020	13.8	408.8	1.41	7.07	-120.9	4.13	.25	8.02	
1025	14.0	459.4	1.22	7.10	-123.9	4.06	.375	8.02	
1030	14.3	483.2	0.70	7.11	-129.4	3.81	.5	8.02	
1035	14.6	490.7	0.61	7.12	-130.6	3.64	.625	8.03	
1040	15.0	495.2	0.56	7.13	-131.5	3.60	.75	8.03	
1045	15.2	496.4	0.53	7.13	-132.5	3.48	.875	8.03	
1050	15.4	495.2	0.50	7.12	-131.8	3.42	1.0	8.03	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

COL

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta GA | Sampler's Name: R. Mayhe

Well ID: MW-306D | Pump Type/Model: Peristaltic | Sample Collection Time: 0920

Total Depth (ft)[1]: 25.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 7.71 | Pump Intake Depth (ft): 25.0 | Sample ID: MW-306D-20150113-01

Well Diameter (in): .75 | Start/Stop Purge Time: 0820 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: 1.55 | Purge Rate (L/min)[2]: .25 / .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0825	14.1	676	4.16	6.27	-5.4	4.08	—	—	Initial
0832	17.8	635	0.82	5.96	8.0	3.81	1.50	—	1 WV
0840	18.7	631	0.56	5.95	9.3	3.76	3.00	—	2 WV
0850	18.9	632	0.31	5.94	10.6	3.70	4.50	—	3 WV
0855	18.9	633	0.30	5.94	11.0	3.71	4.625		
0900	18.9	635	0.26	5.94	11.0	3.68	4.75	—	
0905	19.0	635	0.24	5.94	10.5	~~3.59~~ 3.60	4.875	—	
0910	19.0	634	0.23	5.94	10.8	~~5.12~~ 3.58	5.0	—	
0915	19.1	635	0.21	5.94	10.7	~~5.25~~ 3.61	5.125	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

GROUND WATER SAMPLING LOG SHEET

ERM

Client: AbL Project No.: Sampling Date: 1/13/15, 1/14/15

Site/Location: Augusta Sampler's Name: R. Mayotte

23.79 watercolumn

Well ID: MW-306SAP Pump Type/Model: Peristaltic Sample Collection Time: 0855

Total Depth (ft)[1]: 31.5 Tubing Material: Poly Sample Purge Rate (L/min)[3]:

Depth to Water (ft): 7.71 Pump Intake Depth (ft): 31.0 Sample ID: MW-306SAP-20150114-01

Well Diameter (in): .75 Start/Stop Purge Time: 0950/0814 QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: .55g 2.08L Purge Rate (L/min)[2]: .25 / .025 QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): 6.74 Laboratory Analyses:

Well Condition: Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0950	18.8	1350	2.50	6.06	37.8	36.4	—	—	Initial
~~0955~~ 1000	18.7	1405	1.67	6.08	-17.6	30.2	2.08	—	1WV
0820 ~~1010~~	~~18.2~~	1387	2.24	6.24	-31.0	28.4	4.16	—	2WV - well dry @ 2.75L
0835 ~~1020~~	15.7	1382	1.59	6.06	-21.0	15.1	6.24	—	3WV
0840	15.4	1392	1.49	6.06	-21.7	14.3	6.36	—	Retured on 1/14/15 to continue
0845	15.4	1394	1.39	6.06	-23.5	13.2	6.49	—	purge and stabalization
~~0850~~	15.4	1393	1.30	6.06	-23.1	13.0	6.61	—	
0855	15.4	1390	1.21	6.06	-23.2	12.8	6.74	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

GROUND WATER SAMPLING LOG SHEET

ERM

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: R. Mayette

Well ID: MW-306TZ | Pump Type/Model: Peristaltic | Sample Collection Time: 1140

Total Depth (ft)[1]: 59.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 8.09 | Pump Intake Depth (ft): 59.0 | Sample ID: MW-306TZ-20150113-01

Well Diameter (in): .75 | Start/Stop Purge Time: 1050 1140 | QA/QC Collected? Y/S

Well Volume (gal) = 0.041d²h: 1.18gl 4.47L | Purge Rate (L/min)[2]: .50 / .025 | QA/QC I.D. Dup-01-20150113-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1050	19.0	733	0.77	6.84	-107.9	2.14	—	—	Initial
1100	19.5	735	0.33	6.70	-95.6	1.08	4.47	—	1 WV
1110	19.6	731	0.25	6.64	-89.5	1.05	8.94	—	2 WV
1120	19.5	729	0.23	6.62	-87.2	1.01	13.41	—	3 WV
1125	19.5	731	0.21	6.62	-85.6	1.09	13.54	—	
1130	19.5	728	0.20	6.61	-85.1	1.07	13.66	—	
1135	19.6	729	0.20	6.61	-84.9	1.03	13.79	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

★ Dup-1 ★

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL
Site/Location: Augusta, GA
Project No.:

Sampling Date: 1/15/15
Sampler's Name: 12 Mayette. A. Neal

Well ID: MW-307BR
Total Depth (ft)[1]: —
Depth to Water (ft): —
Well Diameter (in): —
Well Volume (gal) = 0.041d²h: —
d = well diameter (inches) h = length of water column (feet)
Well Condition: Good

Pump Type/Model: Recovery Well
Tubing Material: N/A
Pump Intake Depth (ft): N/A
Start/Stop Purge Time: 1540 1550
Purge Rate (L/min)[2]: ~50
Total Purge Volume (L): —

Sample Collection Time: 1540
Sample Purge Rate (L/min)[3]: —
Sample ID: MW-307BR-20150115-01
QA/QC Collected? — Dup-4-20150115-01
QA/QC I.D. Dup 4-20150115-01
Laboratory Analyses:

Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
N/A	N/A	N/A	N/A	N/A	N/A	—	—	—	No parameters Recorded.
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL-Augusta | Project No.: | Sampling Date: 1/12/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayette

Well ID: MW-307D | Pump Type/Model: Peristaltic | Sample Collection Time: 1530

Total Depth (ft)[1]: 25.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 5.78 | Pump Intake Depth (ft): 25.0 | Sample ID: MW-307D-20150112-01

Well Diameter (in): | Start/Stop Purge Time: 1450 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: .11 (.43L) | Purge Rate (L/min)[2]: .15, .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1450	15.3	432.4	2.33	6.36	-19.3	10.23	—	—	Initial
1458	16.5	442.7	1.37	6.22	-28.8	8.44	.43	—	1WV
1505	17.2	446.5	0.63	6.22	-30.7	8.09	.86	—	2WV
1510	17.4	447.6	0.48	6.21	-32.1	7.85	1.29	—	3WV
1515	17.4	450.0	0.42	6.21	-32.7	7.63	1.41	—	
1520	17.4	451.4	0.39	6.21	-33.0	7.41	1.53	—	
1525	17.5	450.2	0.36	6.21	-33.0	7.38	1.66	—	
1530	17.5	450.4	0.37	6.21	-32.8	7.32	1.78	✓	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC Project No.: 0230712 phase2 Sampling Date: 1/29/15

Site/Location: Augusta, GA Sampler's Name: Barrett Hatcher / Dan Bowling

19.85

Well ID: MW-307D Pump Type/Model: Geopump Peristaltic Pump Sample Collection Time: 1257

Total Depth (ft)[1]: 25.5 Tubing Material: Tyg. 1/4" Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 5.65 Pump Intake Depth (ft): 25.00 Sample ID: MW-307D-20150129-01

Well Diameter (in): .75 Start/Stop Purge Time: 1234 - 1257 QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 0.46(g) / 1.7(L) Purge Rate (L/min)[2]: .75 L/min → 0.1 L/min QA/QC I.D. n/a

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): 6.75 Laboratory Analyses: COI

Well Condition: good Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1240	19.17	0.420	8.19	7.62	21.0	241	0.5	n/a	initial yellow tube
1242	19.88	0.453	2.02	6.65	-44.1	97.7	2.0	n/a	1 vol
1244	20.09	0.458	2.24	6.57	-14.0	81.7	3.5	n/a	2 vol
1247	20.25	0.462	2.48	6.50	-14.3	57.9	5.75	n/a	3 vol
1252	19.55	0.457	3.15	6.42	-16.7	12.6	6.25	n/a	reduced flow to 0.1 L/min
1257	19.53	0.457	2.64	6.43	1.9	4.28	6.75	n/a	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-307 SAP | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 1140

Total Depth (ft)[1]: 31.5 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 6.16 | Pump Intake Depth (ft): ~30' | Sample ID: MW-307SAP-20150113-01

Well Diameter (in): 0.75 | Start/Stop Purge Time: 1000 / ~~1140~~ 1210 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 0.726 gal (2.75 L) | Purge Rate (L/min)[2]: ~~0.2~~ 0.1 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 9.4 | Laboratory Analyses: VOCs, sVOCs, Total Metals, Cyanide

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1010	14.6	0.289	7.86	6.55	38.9	4.05	0.5	—	Initial
1037	17.9	0.569	0.67	6.11	24.7	2.17	3.25	—	1st Well Volume
1104	17.7	0.565	0.41	6.06	30.7	0.85	6.0	—	2nd Well Volume
1131	17.3	0.563	0.51	6.07	35.2	0.39	8.75	—	3rd Well Volume
1134	17.6	0.563	0.39	6.06	34.2	0.66	9.1	—	
1137	17.6	0.564	0.37	6.06	34.3	0.39	9.4	—	
1140	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AbL
Site/Location: Augusta, GA
Project No.:
Sampling Date: N/A 1/15/15
Sampler's Name: N/A

Well ID: MW-308BR
Pump Type/Model:
Sample Collection Time:

Total Depth (ft)[1]:
Tubing Material:
Sample Purge Rate (L/min)[3]:

Depth to Water (ft):
Pump Intake Depth (ft):
Sample ID:

Well Diameter (in):
Start/Stop Purge Time:
QA/QC Collected?

Well Volume (gal) = $0.041d^2h$:
Purge Rate (L/min)[2]:
QA/QC I.D.

d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L):
Laboratory Analyses:

Well Condition:
Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
									Pump not functioning
									No flow Available.
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0220712 ph052 | Sampling Date: 1-29-15

Site/Location: Augusta, GA | Sampler's Name: Bill Mitchell, Barrett Fischer

Well ID: MW-308BR | Pump Type/Model: ~~Bennett~~ Peristaltic pump | Sample Collection Time: 1030

Total Depth (ft)[1]: – | Tubing Material: – | Sample Purge Rate (L/min)[3]: –

Depth to Water (ft): – | Pump Intake Depth (ft): – | Sample ID: MW-308BR-20150129-01

Well Diameter (in): – | Start/Stop Purge Time: – | QA/QC Collected? Yes

Well Volume (gal) = $0.041d^2h$: – | Purge Rate (L/min)[2]: – | QA/QC I.D. DUP-05-20150129-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): – | Laboratory Analyses: COI

Well Condition: _____ | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/13/2015

Site/Location: | Sampler's Name: J. SHOREDITS

Well ID: MW-309BR | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 17:35

Total Depth (ft)[1]: ~~109~~ bgs (106.2) | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.37 btoc | Pump Intake Depth (ft): 97.0 bgs | Sample ID: MW-309BR-20150113-01

Well Diameter (in): 4.00 | Start/Stop Purge Time: 17:00 / 17:28 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 64.9 (245L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI & MNA

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
17:06	13.7	0.232	3.87	8.07	-11.1	2.76	0.3	7.32	
17:11	14.7	0.316	1.36	7.67	-132.0	2.83	0.8	7.33	
17:16	15.3	0.336	1.67	7.27	-126.6	1.29	1.3	7.33	
17:21	15.4	0.345	0.86	7.11	-131.3	1.87	1.8	7.34	
17:26	15.9	0.344	0.75	7.10	-132.1	3.01	2.3	7.34	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									
Stabilizing Criteria[5]	✓ +/- 1°C	0.01 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGCC
Project No.: 0230712 phase2
Sampling Date: 1-29-15
Site/Location: Augusta, GA
Sampler's Name: B.H. Markwell

Well ID: MW-309BR
Pump Type/Model: Geopump Peristaltic pump
Sample Collection Time: 1640
Total Depth (ft)[1]: 106.2
Tubing Material: LDPE
Sample Purge Rate (L/min)[3]: 0.1 L/min
Depth to Water (ft): 7.20
Pump Intake Depth (ft): 95.00
Sample ID: MW-309BR-01012015-01
Well Diameter (in): 4"
Start/Stop Purge Time: 1543 - 1635
QA/QC Collected? Y/S
Well Volume (gal) = 0.041d²h: n/a
Purge Rate (L/min)[2]: 0.1 L/min
QA/QC I.D. MS/MSD
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 5.52
Laboratory Analyses: COI MNA
Well Condition: good
Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H₂O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1545	18.56	0.142	4.73	7.49	-68.5	10.1	0.5	7.30	
1550	18.26	0.166	2.89	8.12	-76.2	3.09	1.0	7.24	
1558	17.88	0.165	1.66	8.50	-120.7	2.21	1.5	7.29	
1600	17.83	0.165	1.39	8.57	-110.8	1.67	2.0	7.27	
1605	17.85	0.165	1.07	8.65	-104.1	1.87	2.5	7.26	
1610	17.76	0.166	1.09	8.76	-112.3	1.48	3.0	7.26	
1615	17.81	0.166	0.80	8.79	-110.0	1.64	3.5	7.26	
1620	17.87	0.166	0.78	8.84	-92.6	3.76	4.0	7.27	
1625	18.07	0.166	0.58	8.91	-119.5	3.78	4.5	7.28	
1630	17.79	0.167	0.52	8.96	-121.2	2.58	5.0	7.27	
1635	17.80	0.167	0.47	8.97	-113.5	2.92	5.5	7.26	Pumped dry @ 5.5 gal; sample
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL Project No.: 0230712 Sampling Date: 1-12-15

Site/Location: Augusta, GA. Sampler's Name: Charlie Brooks

Well ID: MW-310BR Pump Type/Model: Pegasus Sample Collection Time: 15:00

Total Depth (ft)[1]: 90 Tubing Material: Poly 1/4 .17 Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 15.53 Pump Intake Depth (ft): 86 Sample ID: MW-310BR-20150112-01

Well Diameter (in): 4 Start/Stop Purge Time: 14:25 QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 49 (GAL) 183 (L) Purge Rate (L/min)[2]: .1 QA/QC I.D.:

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): 3.0 Laboratory Analyses:

Well Condition: Good Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
14:30	16.0	250.0	2.14	7.13	-34.5	11.7	.5	15.54	
14:35	16.6	248.7	1.27	7.13	-34.7	12.4	1.0	15.55	
14:40	16.6	248.7	1.24	7.13	-34.7	10.9	1.5	15.55	
14:45	16.6	248.5	1.20	7.13	-34.7	9.84	2.0	15.55	
14:50	16.7	248.0	1.17	7.13	-34.9	9.87	2.5	15.56	
14:55	16.7	247.9	1.16	7.13	-34.9	9.42	3.0	15.56	
15:00									sampling @ 15:00
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: August | Sampler's Name: ANDY NEAL

Well ID: MW-310SAP | Pump Type/Model: Peristaltic/Regasus Alexis | Sample Collection Time: 1615

Total Depth (ft)[1]: 35 | Tubing Material: Poly/Silicone | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 13.91 | Pump Intake Depth (ft): 30 | Sample ID: MW-310SAP-20150113-01

Well Diameter (in): 0.75 | Start/Stop Purge Time: 1520/1650 | QA/QC Collected? ND

Well Volume (gal) = 0.041d²h: 1.84 L | Purge Rate (L/min)[2]: ~~0.15~~ 0.15 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses: VOCs, SVOCs, Total Metals, Cyanide, COI, MNA

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1530	15.7	0.486	2.98	6.14	201.7	6.25	0.5	–	Initial
1542	16.0	0.451	0.83	5.65	210.6	2.44	2.25	–	1st Well Volume
1555	16.8	0.455	0.54	5.66	199.7	2.85	5.1	–	2nd Well Volume
1607	16.7	0.457	0.36	5.62	194.8	1.25	6.9	–	3rd Well Volume
1610	16.5	0.458	0.35	5.61	174.5	0.83	7.35	–	
1613	16.5	0.458	0.33	5.61	174.7	0.77	7.80	–	
1615	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

* 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-311 | Pump Type/Model: Peristaltic | Sample Collection Time: 1501

Total Depth (ft)[1]: 32' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.1

Depth to Water (ft): 6.28 | Pump Intake Depth (ft): ~31' | Sample ID: MW-311-20150115-G1

Well Diameter (in): 2" | Start/Stop Purge Time: 0815 / 1006 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.2gal / 16L | Purge Rate (L/min)[2]: ~0.1L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~50L | Laboratory Analyses: COI / MNA

Well Condition: GOOD

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0825	13.8	0.461	1.12	5.75	-37.2	3.60	1	7.25	Purge to excessive Draw
Vol 1 0857	16.0	0.426	0.11	5.90	-107.8	11.1	17	18.52	down. 3 well volumes
Vol 2 0929	16.7	0.423	0.13	5.90	-115.7	15.5	33	25.15	must be Purged
Vol 3 1001	13.9	0.426	0.43	6.24	-111.5	8.61	49	28.04	from well
1006	Well		Pumped		Dry		49.5		
		Sampled		On	Recharge				Purge Rate increased to 0.5 L/min
									After 3 well volumes Purge Rate decreased to 0.1 L/min
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: _____ Project No.: _____ Sampling Date: 1/13/15

Site/Location: _____ Sampler's Name: W. Virgo

Well ID: MW-313 Pump Type/Model: Peristaltic Sample Collection Time: 1617

Total Depth (ft)[1]: 86' Tubing Material: LDPE Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 6.54' Pump Intake Depth (ft): ~59' Sample ID: MW-313-20150113-01

Well Diameter (in): 4" Start/Stop Purge Time: 1520 / 1614 QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 52.1 gal / 197.2 L Purge Rate (L/min)[2]: ~0.1L/min QA/QC I.D. _____

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): ~5.4 L Laboratory Analyses: VOC / MNA

Well Condition: Good Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1530	11.8	0.156	1.50	9.18	-53.4	20.0	1	6.54	Weather: Cold ~45°F
1535	12.2	0.178	0.95	8.69	-35.1	24.4	1.5	6.55	+ Rainy
1540	11.3	0.174	0.99	8.67	-36.0	21.9	2	6.56	
1545	10.7	0.166	1.02	8.75	-37.8	36.6	2.5	6.56	Filled extra MNA
1550	10.3	0.165	1.15	8.79	-37.0	28.4	3	6.56	Bottle - 250mL
1555	10.0	0.164	1.28	8.80	-36.5	26.8	3.5	6.57	
1600	11.9	0.167	0.57	8.76	-37.8	26.3	4	6.57	
1605	13.3	0.169	0.62	8.71	-39.4	15.3	4.5	6.57	
1608	13.5	0.171	0.71	8.70	-39.5	11.1	4.8	6.58	
1611	13.9	0.174	0.57	8.70	-40.2	10.6	5.1	6.58	
1614	13.9	0.173	0.74	8.69	-39.2	10.4	5.4	6.58	
	Well Parameters stable @						1614		
	well sampled @					1617			
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

11 - bottles filled

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: R. Mayette

Well ID: MW-315 | Pump Type/Model: Peristaltic | Sample Collection Time: 1500

Total Depth (ft)[1]: 85.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 7.63 | Pump Intake Depth (ft): 85.0 | Sample ID: MW-315-20150113-01

Well Diameter (in): 6 | Start/Stop Purge Time: 1415 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. Dup-2-20150113-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~~120~~ .875 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1420	17.8	180.3	4.02	7.11	-88.6	1.63	-	7.63	
1425	18.2	553.2	1.95	6.57	-66.3	1.59	.125	7.68	
1430	18.3	598.0	1.10	6.55	-70.5	1.54	.25	7.69	
1435	18.4	619	1.06	6.53	-72.7	1.50	.375	7.69	
1440	18.5	619	0.87	6.53	-74	1.43	.5	7.70	
1445	18.4	617	0.70	6.53	-74.1	1.36	.625	7.71	
1450	18.4	620	0.63	6.52	-74.4	1.13	.75	7.71	
1455	18.6	616	0.61	6.51	-74.7	1.06	.875	7.72	
							~~102~~	~~7.72~~	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

Dup-2

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-318 | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 14:45

Total Depth (ft)[1]: 87.0 bgs | Tubing Material: LDPE/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.47 Stoc | Pump Intake Depth (ft): 75.0 bgs | Sample ID: MW-318-20150114-01

Well Diameter (in): 4.00 | Start/Stop Purge Time: 14:08 / 14:40 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 52.2 (197L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.9 | Laboratory Analyses: COI & MNA

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
14:14	11.4	0.207	3.11	9.10	-65.3	20.5	0.3	7.47	Pieces of sediment in purge water.
14:19	13.7	0.582	1.52	8.60	-85.7	5.68	0.8	7.48	
14:24	15.1	0.660	0.95	8.42	-83.5	0.97	1.3	7.47	
14:29	15.7	0.700	0.68	8.37	-87.5	0.95	1.8	7.48	
14:34	15.3	0.710	0.60	8.33	-87.3	0.54	2.3	7.48	
14:39	14.9	0.710	0.53	8.33	-86.5	1.02	2.8	7.48	
PARAMETERS	ARE	STABLE,	WELL	CAN	BE	SAMPLED			
Stabilizing Criteria[5]	✓ +/- 1°C	0.02 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AbL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayette

Well ID: MW-319 | Pump Type/Model: Peristaltic | Sample Collection Time: 1435

Total Depth (ft)[1]: 80 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 8.98 | Pump Intake Depth (ft): ~~79.5~~ | Sample ID: MW-319-20150114-01

Well Diameter (in): 6" | Start/Stop Purge Time: 1350 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1355	16.0	169.5	3.38	7.68	-134.7	6.12	—	8.98	
1400	16.8	372.1	1.47	7.05	-123.5	6.02	.125	8.98	
1405	17.0	393.0	1.06	7.04	-124.9	5.72	.25	8.99	
1410	16.9	407.1	0.79	7.02	-126.4	5.46	.325	8.98	
1415	17.2	406.7	0.67	7.01	-127.0	5.13	.5	8.98	
1420	17.3	408.7	0.63	6.99	-128.0	5.01	.625	8.98	
1425	17.3	408.6	0.54	6.99	-128.3	4.39	.75	8.98	
1430	17.4	407.9	0.52	6.99	-126.6	4.11	1.00	8.98	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-12-15

Site/Location: Augusta, GA | Sampler's Name: Charlie Brooks

Well ID: MW-320 | Pump Type/Model: Pegasus | Sample Collection Time: 11:35

67.5 Total Depth (ft)[1]: 76.00 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): 8.50 | Pump Intake Depth (ft): 73.00 | Sample ID: MW-320-20150112-01

Well Diameter (in): 4 | Start/Stop Purge Time: 11:00 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 44.3 (GAL) 166.05 (L) | Purge Rate (L/min)[2]: .25 (L) | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 7.50 (L) | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
	~~12.0~~	~~0.09~~							
11:05	12.3	115.3	6.07	9.07	-33.1	0.56	1.25	8.50	
11:10	10.8	120.7	6.09	9.13	-33.9	0.59	2.50	8.50	
11:15	10.9	121.5	6.17	9.13	-34.0	0.48	3.75	8.50	
11:20	10.7	117.0	5.42	9.14	-36.1	0.49	5.00	8.50	
11:25	10.6	114.6	5.21	9.14	-37.0	0.45	6.25	8.50	
11:30	10.5	113.9	5.35	9.14	-37.4	0.44	7.50	8.50	
11:35									Sampling @ 11:35
Stabilizing Criteria[5]	+/- 1°C ✓	+/- 3% ✓	+/- 10% (see note below)[7] ✓	+/- 0.1 unit ✓	+/- 10 mV (see note below)[8] ✓	+/- 10% or <10 NTUs ✓	(see note below)[4] ✓	(see note below)[6] ✓	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August GA. | Sampler's Name: Charlie Brooks

Well ID: MW-321 | Pump Type/Model: Pegasus | Sample Collection Time: 8:50

Total Depth (ft)[1]: 170.2 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 7.15 | Pump Intake Depth (ft): 165.0 | Sample ID: MW-321-20150113-01

Well Diameter (in): 4 | Start/Stop Purge Time: 8:20 - 8:45 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 107(GAL) 400(L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5.00 (L) | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ ~~soda straw~~ (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
8:25	15.7	209.7	2.68	9.57	-43.0	12.4	1.00	7.21	
8:30	15.5	149.0	1.98	9.66	-38.6	1.11	2.00	7.32	
8:35	15.4	148.1	1.99	9.67	-38.4	.90	3.00	7.35	
8:40	15.4	147.4	1.92	9.67	-38.2	.90	4.00	7.35	
8:45	15.3	146.4	1.94	9.66	-37.6	1.05	5.00	7.35	
8:50									Sampling @ 8:50
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-324 | Pump Type/Model: Pegasus | Sample Collection Time: 10:20

Total Depth (ft)[1]: 215 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 7.70 | Pump Intake Depth (ft): 210' | Sample ID: MW-324-20150113-01

Well Diameter (in): 4 | Start/Stop Purge Time: 9:45 - 10:15 | QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 136 (GAL) 510 | Purge Rate (L/min)[2]: .2 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 (L) | Laboratory Analyses:

Well Condition: Good

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
9:50	16.2	65.4	1.03	6.77	-35.4	1.21	1.0	7.71	
9:55	16.7	61.4	.60	6.58	-36.0	1.19	2.00	7.70	
10:00	16.8	61.2	.60	6.57	-36.0	1.14	3.00	7.70	
10:05	16.9	61.4	.57	6.56	-36.1	.98	4.00	7.70	
10:10	17.2	61.2	.54	6.56	-36.3	.90	5.00	7.70	
10:15	17.2	61.4	.55	6.56	-36.3	.91	6.00	7.70	
10:20									Sampling @ 10:20
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta, GA | Sampler's Name: V. Virgo

Well ID: MW-325 | Pump Type/Model: Peristaltic | Sample Collection Time: 0905

Total Depth (ft)[1]: 115 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~ 0.2

Depth to Water (ft): 9.94 | Pump Intake Depth (ft): ~105' | Sample ID: MW-325-20150113-01

Well Diameter (in): 4" | Start/Stop Purge Time: 0827 / 0859 | QA/QC Collected? ~~MW-325-20150113-01~~ NO

Well Volume (gal) = 0.041d²h: 68.9 gal / 260 L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. NO

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~3.1 L | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0838	17.1	0.093	1.20	8.44	-14.0	1.77	~1 L	9.95	
0843	18.1	0.092	0.73	8.79	-51.0	1.67	1.5	10.03	
0848	17.0	0.092	0.63	8.88	-70.4	1.53	2	10.18	
0853	15.9	0.093	0.65	8.94	-79.8	1.54	2.5	10.23	
0856	16.0	0.093	0.67	8.96	-85.4	1.60	32.8	10.27	3 well Volumes Ignored due to 260L Volumes not logical to Purge 780L ; well purged till Stable
0859	15.5	0.093	0.65	8.96	-89.1	1.54	3.1	10.30	
	Well Parameters Stable @						0859		
	Well Sampled @ 0905								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL
Project No.: 0230712
Sampling Date: 1-14-15
Site/Location: ~~Aust~~ Augusta, GA.
Sampler's Name: Charlie Brooks

Well ID: MW-401D
Pump Type/Model: Pegasus
Sample Collection Time: 14:25
Total Depth (ft)[1]: 36.0
Tubing Material: Poly
Sample Purge Rate (L/min)[3]: .2
Depth to Water (ft): 9.50
Pump Intake Depth (ft):
Sample ID: MW-401D-20150114-01
Well Diameter (in): 2
Start/Stop Purge Time: 13:50 - 14:20
QA/QC Collected? — NO
Well Volume (gal) = 0.041d²h: 4.3 16(L)
Purge Rate (L/min)[2]: .2
QA/QC I.D: —
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 6.0(L)
Laboratory Analyses:
Well Condition: NO Lid
Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
13:55	14.1	513.2	2.50	6.27	-33.7	9.12	1.0	9.60	
14:00	14.3	512.9	2.36	6.24	-33.9	9.00	2.0	9.60	
14:05	14.7	512.3	1.75	6.20	-35.0	5.76	3.0	9.60	
14:10	14.7	512.2	1.65	6.19	-37.8	5.43	4.0	9.60	
14:15	14.4	513.8	1.69	6.20	-40.0	5.17	5.0	9.60	
14:20	14.7	513.0	1.33	6.17	-41.9	5.05	6.0	9.60	
14:25									Sampling @ 14:25
									11 Containers
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-401S | Pump Type/Model: Peristaltic | Sample Collection Time: 1108

Total Depth (ft)[1]: 19' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~~MW-401S 20150115-01~~ ~0.2 L/min

Depth to Water (ft): 9.99 | Pump Intake Depth (ft): ~15' | Sample ID: MW-401S-20150115-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1035/1105 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.47gal / 5.6L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. ———

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3L | Laboratory Analyses: COI/MNA

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1045	11.1	0.481	2.00	5.61	14.8	9.85	1	10.01	
1050	12.6	0.488	1.68	5.44	32.8	10.0	1.5	10.02	
1055	13.6	0.486	1.49	5.40	40.9	9.51	2	10.02	
1100	13.2	0.487	1.38	5.39	46.3	8.58	2.5	10.02	
1105	13.5	0.487	1.37	5.38	51.6	7.47	3	10.03	
Well Parameters				Stable @		1105			
Well		Sampled @			1108				
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHORE DTS

Well ID: MW-401SAP | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 17:25

Total Depth (ft)[1]: ~~45.0~~ bgs ±40.0 | Tubing Material: LDPE/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 10.02 Stbe | Pump Intake Depth (ft): ~~42.0~~ 38.0 | Sample ID: MW-401SAP-20150114-01

Well Diameter (in): 2.00 | Start/Stop Purge Time: 16:40/17:19 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.89 (18.5 L) | Purge Rate (L/min)[2]: 0.05 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 1.40 | Laboratory Analyses: COI & MNA

Well Condition: GOOD. | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
16:57	7.9	0.265	4.42	7.27	115.1	6.84	0.3	10.06	
17:02	7.6	0.265	3.70	7.09	130.7	5.67	0.855	10.16	
17:07	7.6	0.259	3.25	6.95	143.2	5.11	0.8	10.22	
17:12	7.5	0.257	3.03	6.89	152.3	5.51	1.05	10.28	
17:17	7.5	0.254	2.80	6.84	159.3	3.84	1.30	10.35	
PARAMETERS	ARE	STABLE,	WELL	CAN	BE	STABILIZED			
Stabilizing Criteria[5]	✓ +/- 1°C	0.004 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGC | Project No.: 0230712.phase2 | Sampling Date: 1-29-2015

Site/Location: Augusta, GA | Sampler's Name: Don Donnan / Barrett Fischer

Well ID: MW-401SAP | Pump Type/Model: Geopump Peristaltic Pump | Sample Collection Time: 1530

Total Depth (ft)[1]: 43.10 | Tubing Material: Idpe .17x1/4 | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 9.73 | Pump Intake Depth (ft): 40.00 chased w/ down | Sample ID: MW-401SAP-20150129-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1338 | QA/QC Collected? yes

Well Volume (gal) = 0.041d²h: 5.47gal / 20.7L | Purge Rate (L/min)[2]: .05 L/min - 0.75 → 0.1 | QA/QC I.D. Dup-06-20150129-01 / MS/MSD

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 63.75 | Laboratory Analyses: COI MNA

Well Condition: Good | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1340	19.08	0.277	4.76	6.04	58.0	1.97	0.5	11.04	
1345	19.11	0.277	4.78	5.95	70.8	1.33	0.75	11.58	excessive drawdown switch to 3well
1412	19.69	0.274	4.06	5.83	97.0	1.85	21.00	27.49	Intro tube purge ; increased flow to 0.75
1440	19.10	0.290	3.67	5.92	103.5	1.54	42.00	28.42	2vol
1507	19.24	0.294	2.06	5.93	99.8	1.23	42.25	28.42	3vol
1512	18.09	0.287	2.10	5.92	98.7	1.20	62.75	27.36	reduced flow to 0.1 L/min
1517	18.07	0.286	1.98	5.94	98.7	1.36	63.25	26.76	
1522	17.92	0.286	1.97	5.94	98.6	0.84	63.75	26.18	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-402D | Pump Type/Model: PERISTALTIC / PEGASUS ALEXIS | Sample Collection Time: 1430

Total Depth (ft)[1]: 26.2 | Tubing Material: POLY / SILICON | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 12.42 | Pump Intake Depth (ft): ~22 | Sample ID: MW-402D-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1405 / 1505 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: VOCs, sVOCs, Total Metals, Cyanide, COC, MNA

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1410	15.9	0.597	1.30	6.03	197.1	2.65	0.5	12.43	
1415	16.2	0.606	0.55	6.00	196.7	5.82	1.0	12.43	
1420	16.3	0.609	0.50	6.00	196.7	7.37	1.5	12.43	
1425	16.0	0.611	6.41	5.99	194.6	7.73	2.0	12.43	
1430	16.2	0.615	0.44	6.00	193.1	6.44	2.5	12.43	
1430	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

X 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING . . SHEET

Client: AGL | Project No.: | Sampling Date: 1-12-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-402S | Pump Type/Model: Peristaltic / Alexis Pegasus | Sample Collection Time: 1430 ~~1500~~

Total Depth (ft)[1]: 19 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 12.49 | Pump Intake Depth (ft): ~15 | Sample ID: MW-402S-20150112-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1350 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.5 | Laboratory Analyses: VOCs, sVOCs, Metals, Cyanide

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1355	16.1	0.692	0.72	5.89	166.3	2.22	0.5	12.50	
1400	17.1	0.614	0.53	5.90	194.8	1.70	1.0	12.50	
1405	17.4	0.596	0.44	5.89	204.4	1.89	1.5	12.50	
1410	17.4	0.593	0.45	5.90	206.4	2.02	2.0	12.50	
1415	17.4	0.594	0.44	5.90	207.7	1.92	2.5	12.50	
1420	17.4	0.598	0.45	5.90	208.5	1.72	3.0	12.50	
1425	17.7	0.596	0.46	5.90	210.1	1.70	3.5	12.50	
1430	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-14-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-404DR | Pump Type/Model: Pegasus | Sample Collection Time: 16:30

Total Depth (ft)[1]: 21.5 | Tubing Material: Poly 1/4 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): 7.50 | Pump Intake Depth (ft): 19.00 | Sample ID: MW-404DR-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 15:25 - 16:27 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.3 (GAL) 8.6 (L) | Purge Rate (L/min)[2]: .1 & .5 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 29.5 | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
15:30	15.0	432.4	4.15	6.07	-34.1	5.78	.5	7.81	Water level Dropped more than .3
15:35	15.9	432.7	3.60	6.07	-34.3	5.20	3.0	8.25	Moving to 3 Well VOL. Method & Change Purge Rate to .5
15:46	16.2	440.8	3.21	6.06	36.5	4.90	9.0	9.95	1 Well VOL
16:04	15.5	450.0	3.86	6.06	-41.3	3.91	18.0	9.95	2 Well VOL
16:18	15.4	450.0	3.46	6.05	-41.5	3.81	23.5	9.95	
16:22	15.4	449.9	3.29	6.06	-41.6	3.07	27.0	9.95	3 Well VOL
16:27	15.3	450.0	3.19	6.06	-41.7	2.84	29.5	9.95	
16:30									Sampling @ 16:30
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Incorrect Id
Should be
MW-408D
01/15/2015

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-408S | Pump Type/Model: Peristaltic | Sample Collection Time: 1130

Total Depth (ft)[1]: 20' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2

Depth to Water (ft): 8.09 | Pump Intake Depth (ft): 15' | Sample ID: MW-408S-20150113-G1

Well Diameter (in): 2" | Start/Stop Purge Time: 1033 / 1127 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.95 gal / 7.4 L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 4.20 L | Laboratory Analyses:

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1043	14.4	1.31	0.67	6.27	-96.9	41.1	1	8.15	
1048	14.4	1.32	1.53	6.27	-102.3	29.4	1.5	8.17	
1053	14.4	1.32	1.18	6.27	-103.9	33.3	2	8.18	
1058	14.4	1.32	0.44	6.28	-105.9	28.5	2.5	8.19	
1103	14.5	1.32	0.75	6.28	-106.0	35.8	3	8.19	Purge Rate Decreased
1108	14.1	1.32	0.74	6.27	-105.5	33.6	3.25	8.18	to 0.05 L/min to
~~10~~ 1113	14.0	1.32	0.87	6.28	-104.8	22.2	3.5	8.17	try and decrease
1118	13.8	1.31	~~0~~ 1.05	6.29	-103.7	16.6	3.75	8.17	turbidity
1121	13.6	1.31	0.96	6.28	-103.9	18.8	3.9	8.17	
1124	13.7	1.31	1.08	6.29	-103.9	19.7	4.05	8.16	
1127	13.7	1.31	0.84	6.29	-103.5	20.1	4.20	8.15	
	well stable @ 1127 w/ Turbidity w/in 10% over last 3 readings								
	well sampled @ 1130								
Stabilizing Criteria[5]	+/- 1°C ✓	+/- 3% ✓	+/- 10% (see note below)[7] ✓	+/- 0.1 unit ✓	+/- 10 mV (see note below)[8] ✓	+/- 10% or <10 NTUs ✓	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

16.62
24.92

ERM

GROUND WATER SAMPLING SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/15/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-408DR | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 11:25

Total Depth (ft)[1]: 24.92 btoc | Tubing Material: LDPE / SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.98 | Pump Intake Depth (ft): ~24 btoc | Sample ID: MW-408D-20150115-01

Well Diameter (in): 2.00 | Start/Stop Purge Time: 10:32 / 11:19 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.78 (10.5L) | Purge Rate (L/min)[2]: 0.05 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 1.9 | Laboratory Analyses: MNA only

Well Condition: GOOD

Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:47	9.0	0.634	2.44	6.59	16.1	28.5	0.3	8.01	WELL WAS SAMPLED ON 01/13/2015
10:52	9.6	0.612	1.26	6.48	15.6	27.6	0.55	8.04	FOR COI AFTER BEING MISTAKEN
10:57	9.2	0.617	1.61	6.43	21.0	33.2	0.8	8.07	(WRONGLY MARKED) AS MW-408S
11:02	9.0	0.614	1.42	6.41	22.6	20.1	1.05	8.09	
11:07	8.9	0.611	1.44	6.40	24.1	30.7	1.3	8.10	
11:12	9.2	0.609	0.93	6.33	26.1	30.8	1.55	8.14	
11:17	9.2	0.613	0.92	6.31	27.4	27.0	1.8	8.16	TURBIDITY ± 10% RANGE
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									
Stabilizing Criteria[5]	✓ +/- 1°C	0.02 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING ... SHEET

Client: AGLC | Project No.: 0230712.052 | Sampling Date: 01/15/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-408S | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 12:20

Total Depth (ft)[1]: 18.64 btoc. | Tubing Material: LDPE/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.97 | Pump Intake Depth (ft): 15.0 | Sample ID: MW-

Well Diameter (in): 2.00 | Start/Stop Purge Time: 11:45/12:18 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.74 (6.58L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
11:55	11.0	1.55	1.33	7.48	-140.5	24.6	0.3	8.02	Black sediment in water.
12:00	11.1	1.59	1.13	7.45	-144.0	24.6	0.8	8.02	
12:05	11.1	1.60	0.75	7.46	-150.6	22.2	1.3	8.02	
12:10	11.3	1.59	0.75	7.45	-154.5	22.1	1.8	8.02	
12:15	11.8	1.60	0.71	7.36	-153.6	22.1	2.3	8.03	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED.									
Stabilizing Criteria[5]	✓ +/- 1°C	0.05 +/- ✓ 3%	+/- 10% (see note below)[7]	+/- ✓ 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712252 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-500BR | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 09:45

Total Depth (ft)[1]: 79.0 bgs | Tubing Material: LDPE / SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 8.84 bgs | Pump Intake Depth (ft): 70.0 | Sample ID: MW-500BR-20150114-01

Well Diameter (in): 4.00 | Start/Stop Purge Time: 09:00 / 09:40 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 46 (174L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.0 | Laboratory Analyses: COI

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

Method: LOW FLOW / VOLUME | ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
09:14	9.9	0.190	2.55	9.68	48.0	1.43	0.84	8.88	Slight odour
09:19	10.0	0.197	1.96	9.89	23.1	1.64	0.9	8.88	
09:24	10.8	0.209	1.70	10.11	1.2	2.55	1.4	8.89	
09:29	11.3	0.211	1.00	10.15	-5.8	1.89	1.9	8.89	
09:34	11.6	0.215	0.78	10.19	-13.1	1.66	2.4	8.90	
09:39	11.7	0.213	0.69	10.24	-21.6	1.82	2.9	8.90	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED.									
Stabilizing Criteria[5]	✓ +/- 1°C	0.007 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	✓ +/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGC | Project No.: | Sampling Date: 1-15-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-505S | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 1100

Total Depth (ft)[1]: 12 | Tubing Material: Poly / silicon | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.27 | Pump Intake Depth (ft): ~ 10.5 | Sample ID: MW-505S-20150115-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1020 / 1100 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.9 L | Purge Rate (L/min)[2]: 0.1 - 0.15 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1030	12.6	0.614	~~1~~ 1.33	6.36	49.3	11.49	0.5	7.35	
1035	12.9	0.621	1.19	6.36	54.3	12.6	1.0	7.40	
1040	12.7	0.636	0.99	6.36	56.4	9.49	1.5	7.48	
1045	12.7	0.639	1.07	6.35	59.7	9.40	2.0	7.50	
1050	12.4	0.642	0.90	6.35	65.4	8.60	2.5	7.52	~~[illegible]~~
1100	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01-15-2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-502D | Pump Type/Model: | Sample Collection Time:

Total Depth (ft)[1]: 25.6 | Tubing Material: | Sample Purge Rate (L/min)[3]:

Depth to Water (ft): NOT STABILIZED | Pump Intake Depth (ft): | Sample ID:

Well Diameter (in): 2.00 | Start/Stop Purge Time: | QA/QC Collected?

Well Volume (gal) = 0.041d²h: NA. | Purge Rate (L/min)[2]: | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
PULLED FIVE "SOCKS"/BAGS OUT OF WELL AND DROPPED									
INTERFACE PROBE DOWN WELL.									
PRODUCT IS PRESENT AT ± 23.0 - 25.6 FT BTOC. → WELL NOT SAMPLED									
STRONG ODOR									
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AbL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-503BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1325

Total Depth (ft)[1]: 76' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2

Depth to Water (ft): 7.66 | Pump Intake Depth (ft): ~66' | Sample ID: MW-503BR-20150115-01

Well Diameter (in): 6" | Start/Stop Purge Time: 1252 / 1322 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 100.8gal / 382L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3 | Laboratory Analyses: COI / MNA

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1302	15.7	0.075	0.51	6.03	-19.2	7.47	1	7.76	
1307	15.5	0.075	0.74	5.99	-22.3	2.65	1.5	7.78	
1312	14.5	0.074	0.74	5.97	-26.6	2.18	2	7.80	
1317	14.7	0.074	6.66	5.96	-29.1	2.08	2.5	7.81	
1322	15.3	0.074	0.39	5.95	-31.9	2.27	3	7.82	
	Well Parameters Stable @						1322		
	Well Sampled @				1325				
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-504BR | Pump Type/Model: Peristaltic | Sample Collection Time: 0858

Total Depth (ft)[1]: 80 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 7.05' | Pump Intake Depth (ft): ~70' | Sample ID: MW-504BR-20150114-01

Well Diameter (in): 4" | Start/Stop Purge Time: 0820/0855 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 47.8 gal / 181.13 | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.5 L | Laboratory Analyses: COI

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0830	13.0	0.174	1.19	9.09	-10.1	21.5	1	7.05	
0835	12.7	0.160	0.73	9.31	-34.2	7.19	1.7	7.05	
0840	12.7	0.159	0.61	9.40	-43.8	4.84	2	7.05	
0845	12.9	0.159	0.54	9.44	-50.5	3.65	2.5	7.06	
0850	12.7	0.161	0.46	9.48	-54.3	4.56	3	7.06	
0855	13.1	0.160	0.43	9.49	-60.6	4.63	3.5	7.06	
	well Parameters Stable @						0855		
	well Sampled @ 0858								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-15-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-505D | Pump Type/Model: Pegasus | Sample Collection Time: 10:00

Total Depth (ft)[1]: 28.5 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 4.99 | Pump Intake Depth (ft): 24.00 | Sample ID: MW-505D-20150115-01

Well Diameter (in): 2 | Start/Stop Purge Time: 9:15 - | QA/QC Collected? AO

Well Volume (gal) = 0.041d²h: 3.85 (Gal) 14.5 (L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 8.0 | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
9:20	14.6	243.0	2.85	6.23	-62.8	20.9	1.0	4.99	
9:25	15.4	182.7	2.60	6.19	-60.3	14.4	2.0	4.99	
9:30	15.4	185.9	2.30	6.14	-60.5	33.5	3.0	4.99	
9:35	15.4	330.9	.71	6.08	-62.1	57.9	4.0	4.99	
9:40	15.6	419.9	.44	6.08	-64.8	20.6	5.0	4.99	
9:45	15.8	427.5	.45	6.09	-66.1	13.4	6.0	4.99	
9:50	15.6	433.9	.33	6.08	-66.9	11.2	7.0	4.99	
9:55	15.7	433.9	.29	6.07	-67.0	9.8	8.0	4.99	
10:00									Sampling @ 10:00
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGC Project No.: Sampling Date: 1/15/14

Site/Location: Augusta, GA Sampler's Name: R. Mayette

Well ID: MW-507BR Pump Type/Model: Peristaltic Sample Collection Time: 1035

Total Depth (ft)[1]: 125 Tubing Material: Poly Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 16.92 Pump Intake Depth (ft): 124.5 Sample ID: MW-507BR-20150115-01

Well Diameter (in): 6" Start/Stop Purge Time: 0940 1035 QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: Purge Rate (L/min)[2]: .025 QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): Laboratory Analyses:

Well Condition: Good Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0955	14.0	231.8	4.56	8.76	-109.0	4.89	—	16.92	
1000	15.7	230.5	2.67	8.95	-114.3	4.63	.125	17.08	
1005	15.8	230.1	2.56	8.95	-114.4	4.07	.25	17.09	
1010	15.2	230.5	2.28	8.96	-114.3	3.96	.375	17.09	
1015	15.1	230.0	2.41	8.97	-114.6	3.81	.5	17.09	
1020	15.2	230.2	2.36	8.98	-114.7	3.64	.625	17.09	
1025	15.2	230.3	2.28	8.98	-114.6	3.56	.75	17.10	
1030	15.2	230.4	2.29	8.98	-114.6	3.16	.875	17.10	
1035	15.2	230.2	2.24	8.98	-114.7	3.06	1.0	17.10	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayotte

Well ID: MW-508BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1210

Total Depth (ft)[1]: 86.0 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 9.89 | Pump Intake Depth (ft): 85.6 | Sample ID: MW-508BR-20150115-01

Well Diameter (in): 6 | Start/Stop Purge Time: 1120 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses: —

Well Condition: | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1125	13.9	2237	2.60	11.96	-217.6	3.88	—	9.94	
1130	15.0	2122	2.04	11.97	-222.6	3.67	.125	9.95	
1135	15.2	2059	1.45	11.97	-228.8	3.60	.25	10.05	
1140	14.8	2044	1.52	11.98	-219.1	3.42	.375	10.06	
1145	12.6	2088	1.82	12.02	-225.1	3.29	.50	10.08	
1150	11.4	2108	1.89	12.04	-227.2	3.08	.625	10.09	
1155	11.1	2102	1.87	12.06	-228.6	2.87	.75	10.09	
1200	11.0	2104	1.90	12.07	-228.4	2.03	.875	10.10	
1205	11.2	2100	1.93	12.05	-228.6	1.86	1.0	10.11	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

GROUND WATER SAMPLING LOG SHEET

ERM

Client: AGL | Project No.: | Sampling Date: 1-15-15

Site/Location: August | Sampler's Name: ANDY NEAL

Well ID: MW-509BR | Pump Type/Model: PERISTALTIC / Pegasus Alex8 | Sample Collection Time: 855

Total Depth (ft)[1]: 76 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): ~~6.84~~ 6.81 | Pump Intake Depth (ft): 0 50 | Sample ID: MW-509BR-20150115-01

Well Diameter (in): 6 | Start/Stop Purge Time: 815 / 945 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

* Probe only went to ~58.5'

* 11 Bottles

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
825	15.5	0.226	1.36	9.19	-98.0	6.10	0.5	6.85	Yellowish-brown; sulfur smell
830	13.0	0.203	0.63	9.37	-111.4	5.11	1.0	6.86	
835	12.9	0.202	0.62	9.41	-115.0	4.02	1.5	6.88	
840	12.9	0.202	0.55	9.43	-119.1	4.83	2.0	6.88	
845	12.8	0.205	0.49	9.48	-124.0	3.99	2.5	6.88	
855	SAMPLE		TIME						
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-510BR | Pump Type/Model: Peristaltic/Pegasus Alexis | Sample Collection Time: 1035

Total Depth (ft)[1]: 80 | Tubing Material: POLY/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 6.92 | Pump Intake Depth (ft): ~65 | Sample ID: MW-510BR-20150114-01

Well Diameter (in): 6 | Start/Stop Purge Time: 1000/1120 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1010	15.5	0.199	0.72	7.15	-132.7	5.86	0.5	6.98	Yellow-brown color; Sulphur-like odor
1015	13.7	0.209	0.56	6.94	-136.9	7.08	1.0	7.00	
1020	12.2	0.202	0.47	6.76	-132.9	3.86	1.5	7.02	
1025	12.1	0.202	0.53	6.73	-133.4	3.76	2.0	7.02	
1030	11.7	0.203	0.43	6.72	-135.7	4.82	2.5	7.04	
1035	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-511BR | Pump Type/Model: Peristaltic/Pegasus Alexis | Sample Collection Time: ~~955~~ 905

Total Depth (ft)[1]: 76 | Tubing Material: Poly/Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.00 | Pump Intake Depth (ft): 60 | Sample ID: MW-511BR-20150114-01

Well Diameter (in): 6 | Start/Stop Purge Time: 810 / 935 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5.0 | Laboratory Analyses: COC

Well Condition: Good

Sampling Method (check all that apply): ☑ Soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
820	17.4	0.322	0.45	10.40	-88.3	37.8	0.5	7.08	Slight yellow color; Sulphur-like odor
825	17.6	0.306	0.33	10.36	-104.0	27.2	1.0	7.14	
830	16.3	0.282	0.34	10.31	-106.3	23.4	1.5	7.20	
835	13.7	0.282	0.39	10.33	-106.7	22.3	2.0	7.21	
840	11.9	0.273	0.45	10.34	-104.4	22.5	2.5	7.23	
845	11.6	0.270	0.50	10.33	-103.1	23.5	3.0	7.24	
850	11.7	0.271	0.72	10.33	-104.8	20.5	3.5	7.26	
855	11.3	0.273	0.66	10.35	-110.0	20.8	4.0	7.26	
900	11.3	0.274	0.66	10.35	-110.2	20.6	4.5	7.26	
905	11.3	0.274	0.68	10.35	-109.8	20.6	5.0	7.26	
905	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayette

Well ID: MW-512BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1620

Total Depth (ft)[1]: 84.00 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 7.81 | Pump Intake Depth (ft): 83.80 | Sample ID: MW-512BR-20150114-01

Well Diameter (in): 8" | Start/Stop Purge Time: 1535 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1540	15.8	432.0	3.69	7.88	-146.3	3.09	—	7.81	
1545	16.7	637	1.03	7.11	-103.6	3.01	.125	7.93	
1550	16.2	648	0.78	7.10	-104.4	2.96	.25	7.93	
1555	16.4	641	0.68	7.09	-104.2	2.80	.325	7.93	
1600	16.0	641	0.59	7.09	-103.6	2.63	.5	7.93	
1605	15.7	634	0.62	7.09	-102.3	2.47	.625	7.93	
1610	15.6	630	0.56	7.08	-102.0	2.13	.75	7.92	
1615	15.5	632	0.57	7.08	-101.9	2.01	1.0	7.92	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta | Sampler's Name: W. Virgel

Well ID: MW-513BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1115

Total Depth (ft)[1]: 82' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 8.50 | Pump Intake Depth (ft): ~65' | Sample ID: MW-513BR-20150114-01

Well Diameter (in): 6" | Start/Stop Purge Time: 1022/1113 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 108.5 gal / 410 L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5 L | Laboratory Analyses: COT

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1032	14.3	0.63	0.90	6.32	-27.5	281	1	8.51	
1037	14.5	0.65	0.60	6.09	-21.1	34.5	1.5	8.51	
1042	15.0	0.66	0.89	6.08	-33.0	23.8	2	8.51	
1047	15.1	0.66	0.93	6.06	-15.0	17.6	2.5	8.51	
1052	15.1	0.65	0.92	6.05	-14.9	18.7	3	8.51	
1057	14.9	0.66	0.90	6.05	-16.2	12.8	3.5	8.52	
~~1102~~	15.4	0.65	0.96	6.04	-16.3	15.8	4	8.52	
1107	14.0	0.65	0.76	6.03	-15.1	8.69	4.5	8.52	
1110	14.0	0.65	1.05	6.03	-17.9	8.26	4.8	8.52	
1113	13.7	0.65	0.75	6.03	-14.1	8.89	5.1	8.52	
	Well Parameters Stable @							1113	
	Well Sampled @					1115			
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-14-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-600 | Pump Type/Model: Pegasus | Sample Collection Time: 10:00

Total Depth (ft)[1]: 32 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): ~~5~~ 5.68 | Pump Intake Depth (ft): 30.0 | Sample ID: MW-600-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 8:10 - 9:59 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.3 (GAL) 16 (L) | Purge Rate (L/min)[2]: .2 & .5 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~~50~~ 53.0 | Laboratory Analyses: See sampling Matrix

Well Condition: GOOD | Sampling Method (check all that apply): ☐ Soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
8:15	12.5	378.9	1.50	5.94	-71.9	62.7	1.0	6.05	Water level Droped more than .3 Moving
8:20	16.6	435.0	.60	5.93	-71.4	65.2	3.5	6.75	to 3 Well Vol Method & Changed purge
8:25	17.4	426.8	.39	5.94	-72.0	65.4	6.0	7.30	Rate to .5
~~8:30~~									
8:50	18.8	203.0	.40	6.16	-73.0	14.5	73.8	11.69	1 Well Vol
9:22	18.5	245.7	.34	6.11	-71.6	34.5	54.3	16.10	2 Well Vol
9:49	18.0	255.9	.18	6.10	-71.3			16.94	
9:54	18.0	256.0	.17	6.10	-71.3	50.5		17.43	3 Well Vol.
9:59	17.9	256.6	.18	6.10	-71.3	53.0		17.51	
10:00									Sampling @ 10:00
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible]G SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-14-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brookes

Well ID: MW-G01 | Pump Type/Model: Pegasus | Sample Collection Time: 11:10

Total Depth (ft)[1]: 27 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): 6.89 | Pump Intake Depth (ft): 23 | Sample ID: MW-G01-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 10:35 — | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 3.2(GAL) 12(L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D: —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0(L) | Laboratory Analyses: See Sampling Matrix

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:40	16.0	480.9	9.4	5.91	-32.8	10.4	1.0	6.93	
10:45	16.1	508.7	.67	5.91	-33.9	8.91	2.0	6.93	
10:50	16.1	518.5	.38	5.92	-37.4	7.16	3.0	6.93	
10:55	15.9	524.7	.28	5.92	-42.1	4.77	4.0	6.93	
11:00	15.9	527.8	.27	5.92	-42.4	3.38	5.0	6.93	
11:05	15.8	528.7	.28	5.92	-42.8	3.12	6.0	6.93	
11:10									Sampling @ 11:10
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-602 | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 905

Total Depth (ft)[1]: 32 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.50 | Pump Intake Depth (ft): ~25 | Sample ID: MW-602-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 830 / 930 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: VOCs, sVOCs, Total Metals, Cyanide

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
840	17.0	0.613	0.57	5.78	6.7	21.0	0.5	7.61	
845	17.6	0.612	0.45	5.78	-14.1	16.5	1.0	7.61	
850	17.4	0.612	0.51	5.77	-25.6	15.0	1.5	7.61	
855	17.5	0.610	0.48	5.77	-30.3	16.9	2.0	7.61	
900	17.4	0.613	0.62	5.77	-33.0	15.5	2.5	7.61	
905	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded everv 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW everv 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-603 | Pump Type/Model: | Sample Collection Time: 10:40 (no sample collected)

Total Depth (ft)[1]: 26.61 | Tubing Material: | Sample Purge Rate (L/min)[3]:

Depth to Water (ft): 6.25 | Pump Intake Depth (ft): | Sample ID:

Well Diameter (in): 2.00 | Start/Stop Purge Time: | QA/QC Collected?

Well Volume (gal) = $0.041d^2h$: | Purge Rate (L/min)[2]: | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
± 1.0	Ft of DNAPL at bottom of well,					well,			
well	cannot be sampled.								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
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(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

Laboratory Analytical Reports

Appendix B

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

January 22, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501859

Analytical Environmental Services, Inc. received 7 samples on 1/13/2015 12:02:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501859

Date: 01/12/2015 Page 1 of 1

COMPANY	ADDRESS
ENVIRONMENTAL RESOURCES MANAGEMENT	3200 WINDY HILL RD SE SUITE 1500W ATLANTA, GA 30339
PHONE (678) 486-2700	FAX:
SAMPLED BY: R. MAYETTE, C. BROOKS, A. NEAL	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC (8260B)	SVOC (8270C)	Total Metals (6010B, 7470A)	Cyanide (9012A)	PRESERVATION (See codes) H	NA	N	NaOH	REMARKS	No # of Containers
1	MW-21-20150112-01	01/12/15	11:10	X		GW	3	2	1	1						7
2	MW-320-20150112-01	-11-	11:35													7
3	MW-207-20150112-01	-11-	12:20													7
4	MW-402S-20150112-01	-11-	14:30													7
5	MW-310BR-20150112-01	-11-	15:00												one plastic is unpr.	7
6	MW-307D-20150112-01	-11-	15:30	↓		↓	↓	↓	↓	↓						7
7	TB-01	NA	NA			W	2									2
8	TB-02	NA	NA			W	2									2
9																
10																
11																
12																
13																
14																

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/13/2015 9:30	1:	01-13-2015 9:30AM
2:	01-13-2015 12:02pm	2: Cataya Reeves	1/13/15 12:02p
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AHLC AUGUSTA
PROJECT #: 0230712.52
SITE ADDRESS: 812 8th St Augusta, GA 30901
SEND REPORT TO: greg.sirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 46

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

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

SPECIAL INSTRUCTIONS/COMMENTS: use site specific analyte list

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

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 22-Jan-15

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501859

Case Narrative

Sample ID "TB-02" was listed on the COC, but was not received. Andreas Shoredits was notified on 1/14/15.

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-21-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:10:00 AM
Lab ID:	1501859-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 17:19	NH
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Trichloroethene	18	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Surr: 4-Bromofluorobenzene	90.8	70.6-123		%REC	201805	1	01/16/2015 17:19	NH
Surr: Dibromofluoromethane	104	78.7-124		%REC	201805	1	01/16/2015 17:19	NH
Surr: Toluene-d8	96.1	81.3-120		%REC	201805	1	01/16/2015 17:19	NH
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 11:47	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 11:47	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 11:47	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201765	1	01/19/2015 11:47	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:04	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:33	JL
Barium	0.0854	0.0200		mg/L	201743	1	01/16/2015 21:33	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-21-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:10:00 AM
Lab ID:	1501859-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:33	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-320-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:35:00 AM
Lab ID:	1501859-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/19/2015 14:36	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Surr: 4-Bromofluorobenzene	96.2	70.6-123		%REC	201805	1	01/19/2015 14:36	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201805	1	01/19/2015 14:36	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201805	1	01/19/2015 14:36	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	13	5.0		ug/L	201765	10	01/20/2015 18:40	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 14:47	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 14:47	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Surr: 4-Terphenyl-d14	103	55.4-136		%REC	201765	1	01/19/2015 14:47	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:16	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:37	JL
Barium	0.0287	0.0200		mg/L	201743	1	01/16/2015 21:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-320-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:35:00 AM
Lab ID:	1501859-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:37	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 12:20:00 PM
Lab ID:	1501859-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 17:03	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Surr: 4-Bromofluorobenzene	81.5	70.6-123		%REC	201805	1	01/16/2015 17:03	NP
Surr: Dibromofluoromethane	112	78.7-124		%REC	201805	1	01/16/2015 17:03	NP
Surr: Toluene-d8	98.7	81.3-120		%REC	201805	1	01/16/2015 17:03	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 12:13	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 12:13	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 12:13	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Indeno(1,2,3-cd)pyrene	0.058	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Surr: 4-Terphenyl-d14	90	55.4-136		%REC	201765	1	01/19/2015 12:13	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:18	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:40	JL
Barium	0.271	0.0200		mg/L	201743	1	01/16/2015 21:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 12:20:00 PM
Lab ID:	1501859-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:40	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/20/2015 19:47	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402S-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 2:30:00 PM
Lab ID:	1501859-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 17:32	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Surr: 4-Bromofluorobenzene	83.8	70.6-123		%REC	201805	1	01/16/2015 17:32	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	201805	1	01/16/2015 17:32	NP
Surr: Toluene-d8	98.2	81.3-120		%REC	201805	1	01/16/2015 17:32	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 15:13	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 15:13	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 15:13	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Surr: 4-Terphenyl-d14	96.6	55.4-136		%REC	201765	1	01/19/2015 15:13	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:20	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:44	JL
Barium	0.0777	0.0200		mg/L	201743	1	01/16/2015 21:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402S-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 2:30:00 PM
Lab ID:	1501859-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:44	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310BR-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:00:00 PM
Lab ID:	1501859-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 18:01	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Surr: 4-Bromofluorobenzene	79.6	70.6-123		%REC	201805	1	01/16/2015 18:01	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	201805	1	01/16/2015 18:01	NP
Surr: Toluene-d8	93.2	81.3-120		%REC	201805	1	01/16/2015 18:01	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	7.6	0.50		ug/L	201765	1	01/19/2015 15:39	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 15:39	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 15:39	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201765	1	01/19/2015 15:39	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:22	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:48	JL
Barium	0.142	0.0200		mg/L	201743	1	01/16/2015 21:48	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310BR-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:00:00 PM
Lab ID:	1501859-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:48	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:30:00 PM
Lab ID:	1501859-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 18:30	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Surr: 4-Bromofluorobenzene	81.8	70.6-123		%REC	201805	1	01/16/2015 18:30	NP
Surr: Dibromofluoromethane	112	78.7-124		%REC	201805	1	01/16/2015 18:30	NP
Surr: Toluene-d8	99.1	81.3-120		%REC	201805	1	01/16/2015 18:30	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 12:39	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 12:39	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 12:39	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Surr: 4-Terphenyl-d14	61.1	55.4-136		%REC	201765	1	01/19/2015 12:39	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:24	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:52	JL
Barium	0.0705	0.0200		mg/L	201743	1	01/16/2015 21:52	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:30:00 PM
Lab ID:	1501859-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:52	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015
Lab ID:	1501859-007	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/16/2015 15:35	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Surr: 4-Bromofluorobenzene	77	70.6-123		%REC	201805	1	01/16/2015 15:35	NP
Surr: Dibromofluoromethane	108	78.7-124		%REC	201805	1	01/16/2015 15:35	NP
Surr: Toluene-d8	96.1	81.3-120		%REC	201805	1	01/16/2015 15:35	NP

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501859

Checklist completed by Ioana Pacurar 1/14/15
Signature Date

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

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

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

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

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

Cooler #1 3.1°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

Chain of custody agrees with sample labels? Yes ✓ +1D 1/14 No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by David

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

1501859

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1501859-005D	SM4500	6	12	NaOH	19969	mL 9 Pellets	12	IP	1/14	3:35pm
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
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						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

DWM 8/22/2014 10:01 AM

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201743

Sample ID: **MB-201743** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018659**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201743** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018660**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9851	0.0200	1.000		98.5	80	120				
Arsenic	0.9794	0.0500	1.000		97.9	80	120				
Barium	0.9686	0.0200	1.000		96.9	80	120				
Beryllium	1.003	0.0100	1.000		100	80	120				
Cadmium	0.9856	0.0050	1.000		98.6	80	120				
Chromium	1.000	0.0100	1.000		100	80	120				
Copper	1.011	0.0100	1.000		101	80	120				
Lead	0.9590	0.0100	1.000		95.9	80	120				
Nickel	0.9614	0.0200	1.000		96.1	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201743

Sample ID: **LCS-201743** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018660**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Selenium	0.9606	0.0200	1.000		96.1	80	120				
Thallium	0.9843	0.0200	1.000		98.4	80	120				
Vanadium	0.9980	0.0100	1.000		99.8	80	120				
Zinc	0.9694	0.0200	1.000		96.9	80	120				

Sample ID: **1501744-001BMS** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018662**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9951	0.0200	1.000		99.5	75	125				
Arsenic	0.9949	0.0500	1.000		99.5	75	125				
Barium	0.9794	0.0200	1.000	0.009019	97.0	75	125				
Beryllium	1.010	0.0100	1.000		101	75	125				
Cadmium	0.9912	0.0050	1.000		99.1	75	125				
Chromium	1.009	0.0100	1.000	0.0009875	101	75	125				
Copper	1.027	0.0100	1.000		103	75	125				
Lead	0.9630	0.0100	1.000		96.3	75	125				
Nickel	0.9666	0.0200	1.000		96.7	75	125				
Selenium	0.9733	0.0200	1.000		97.3	75	125				
Thallium	0.9995	0.0200	1.000		99.9	75	125				
Vanadium	0.9871	0.0100	1.000	0.001583	98.6	75	125				
Zinc	0.9730	0.0200	1.000		97.3	75	125				

Sample ID: **1501744-001BMSD** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018663**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9901	0.0200	1.000		99.0	75	125	0.9951	0.510	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201743

Sample ID: **1501744-001BMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C**
Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018663**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.9951	0.0500	1.000		99.5	75	125	0.9949	0.017	20	
Barium	0.9786	0.0200	1.000	0.009019	97.0	75	125	0.9794	0.082	20	
Beryllium	1.007	0.0100	1.000		101	75	125	1.010	0.346	20	
Cadmium	0.9922	0.0050	1.000		99.2	75	125	0.9912	0.096	20	
Chromium	1.007	0.0100	1.000	0.0009875	101	75	125	1.009	0.168	20	
Copper	1.024	0.0100	1.000		102	75	125	1.027	0.323	20	
Lead	0.9636	0.0100	1.000		96.4	75	125	0.9630	0.068	20	
Nickel	0.9649	0.0200	1.000		96.5	75	125	0.9666	0.183	20	
Selenium	0.9845	0.0200	1.000		98.4	75	125	0.9733	1.15	20	
Thallium	1.000	0.0200	1.000		100	75	125	0.9995	0.061	20	
Vanadium	0.9761	0.0100	1.000	0.001583	97.4	75	125	0.9871	1.12	20	
Zinc	0.9709	0.0200	1.000		97.1	75	125	0.9730	0.214	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201761

Sample ID: **MB-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013613**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013614**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2614	0.010	0.2500		105	90	110				

Sample ID: **1501857-004BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013637**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.03630	0.010	0.2500	0.006600	11.9	90	110				S

Sample ID: **1501923-001BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013635**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2302	0.010	0.2500		92.1	90	110				

Sample ID: **1501923-001BMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013636**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2317	0.010	0.2500		92.7	90	110	0.2302	0.649	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **MB-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017697**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.222	0	2.000		61.1	55.4	136				

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.704	0.50	2.000		85.2	66.3	118				
Acenaphthylene	1.533	1.0	2.000		76.6	64	120				
Anthracene	1.723	0.050	2.000		86.1	64.6	127				
Benz(a)anthracene	1.907	0.050	2.000		95.3	60.6	137				
Benzo(a)pyrene	1.718	0.050	2.000		85.9	64	124				
Benzo(b)fluoranthene	1.924	0.10	2.000		96.2	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.675	0.10	2.000	0.01532	83.0	49.9	137				
Benzo(k)fluoranthene	1.780	0.050	2.000		89.0	61.7	137				
Chrysene	1.890	0.050	2.000		94.5	65.5	127				
Dibenz(a,h)anthracene	1.797	0.10	2.000	0.01265	89.2	52.4	130				
Fluoranthene	2.067	0.10	2.000		103	67	131				
Fluorene	1.680	0.10	2.000		84.0	68.3	120				
Indeno(1,2,3-cd)pyrene	1.746	0.050	2.000	0.01214	86.7	50.4	139				
Naphthalene	1.660	0.50	2.000		83.0	61.1	120				
Phenanthrene	1.719	0.050	2.000	0.008850	85.5	68	119				
Pyrene	1.737	0.050	2.000		86.8	62	127				
Surr: 4-Terphenyl-d14	1.820	0	2.000		91.0	55.4	136				

Sample ID: **1501859-006BMS** Client ID: **MW-307D-20150112-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283969**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/18/2015** Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.664	0.50	2.000		83.2	45.6	120				
Acenaphthylene	1.760	1.0	2.000	0.01176	87.4	48.3	124				
Anthracene	1.916	0.050	2.000	0.02359	94.6	57.7	124				
Benz(a)anthracene	2.526	0.050	2.000		126	50.3	143				
Benzo(a)pyrene	1.657	0.050	2.000		82.9	44.2	127				
Benzo(b)fluoranthene	3.288	0.10	2.000		164	48.4	125				S
Benzo(g,h,i)perylene	1.665	0.10	2.000		83.2	40.2	122				
Benzo(k)fluoranthene	1.508	0.050	2.000		75.4	45.5	122				
Chrysene	1.717	0.050	2.000		85.9	46	124				
Dibenz(a,h)anthracene	1.993	0.10	2.000		99.7	40.1	128				
Fluoranthene	2.002	0.10	2.000	0.01522	99.3	58	127				
Fluorene	1.747	0.10	2.000	0.01972	86.4	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **1501859-006BMS**	Client ID: **MW-307D-20150112-01**			Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.991	0.050	2.000		99.5	40.3	129				
Naphthalene	1.643	0.50	2.000	0.02433	80.9	46.6	120				
Phenanthrene	1.697	0.050	2.000	0.01126	84.3	50.6	122				
Pyrene	1.799	0.050	2.000	0.04382	87.8	50.1	128				
Surr: 4-Terphenyl-d14	1.916	0	2.000		95.8	55.4	136				

Sample ID: **1501859-006BMSD**	Client ID: **MW-307D-20150112-01**			Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019921**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.829	0.50	2.000		91.5	45.6	120	1.664	9.44	29.4	
Acenaphthylene	1.943	1.0	2.000	0.01176	96.6	48.3	124	1.760	9.89	32.5	
Anthracene	2.068	0.050	2.000	0.02359	102	57.7	124	1.916	7.63	21.9	
Benz(a)anthracene	2.738	0.050	2.000		137	50.3	143	2.526	8.06	26.8	
Benzo(a)pyrene	1.776	0.050	2.000		88.8	44.2	127	1.657	6.92	40.9	
Benzo(b)fluoranthene	3.674	0.10	2.000		184	48.4	125	3.288	11.1	24.2	S
Benzo(g,h,i)perylene	1.799	0.10	2.000		90.0	40.2	122	1.665	7.77	26.2	
Benzo(k)fluoranthene	1.620	0.050	2.000		81.0	45.5	122	1.508	7.10	23.3	
Chrysene	1.880	0.050	2.000		94.0	46	124	1.717	9.06	25	
Dibenz(a,h)anthracene	2.135	0.10	2.000		107	40.1	128	1.993	6.88	23.6	
Fluoranthene	2.173	0.10	2.000	0.01522	108	58	127	2.002	8.22	23.5	
Fluorene	1.928	0.10	2.000	0.01972	95.4	52.6	124	1.747	9.84	31.5	
Indeno(1,2,3-cd)pyrene	2.131	0.050	2.000		107	40.3	129	1.991	6.82	28.8	
Naphthalene	1.788	0.50	2.000	0.02433	88.2	46.6	120	1.643	8.47	22.9	
Phenanthrene	1.867	0.050	2.000	0.01126	92.8	50.6	122	1.697	9.54	20.2	
Pyrene	1.962	0.050	2.000	0.04382	95.9	50.1	128	1.799	8.65	24.7	
Surr: 4-Terphenyl-d14	2.060	0	2.000		103	55.4	136	1.916	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **MB-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014981**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	42.70	0	50.00		85.4	70.6	123				
Surr: Dibromofluoromethane	54.98	0	50.00		110	78.7	124				
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120				

Sample ID: **LCS-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.66	5.0	50.00		93.3	72.8	128				
Toluene	46.50	5.0	50.00		93.0	74.9	127				
Trichloroethene	49.63	5.0	50.00		99.3	70.5	134				
Surr: 4-Bromofluorobenzene	40.51	0	50.00		81.0	70.6	123				
Surr: Dibromofluoromethane	50.05	0	50.00		100	78.7	124				
Surr: Toluene-d8	46.15	0	50.00		92.3	81.3	120				

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.43	5.0	50.00		105	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	51.66	5.0	50.00		103	70.5	137				
Trichloroethene	52.57	5.0	50.00		105	71.8	139				
Surr: 4-Bromofluorobenzene	37.51	0	50.00		75.0	70.6	123				
Surr: Dibromofluoromethane	48.86	0	50.00		97.7	78.7	124				
Surr: Toluene-d8	47.61	0	50.00		95.2	81.3	120				

Sample ID: **1501934-001AMSD** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016674**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	53.44	5.0	50.00		107	70	135	52.43	1.91	20	
Toluene	52.74	5.0	50.00		105	70.5	137	51.66	2.07	20	
Trichloroethene	53.90	5.0	50.00		108	71.8	139	52.57	2.50	20	
Surr: 4-Bromofluorobenzene	37.47	0	50.00		74.9	70.6	123	37.51	0	0	
Surr: Dibromofluoromethane	49.24	0	50.00		98.5	78.7	124	48.86	0	0	
Surr: Toluene-d8	45.13	0	50.00		90.3	81.3	120	47.61	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201823

Sample ID: **MB-201823**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017651**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201823**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017652**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005081	0.00020	0.0050		102	80	120				

Sample ID: **1501859-001CMS**	Client ID: **MW-21-20150112-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017656**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.003917	0.00020	0.0050		78.3	70	130				

Sample ID: **1501859-001CMSD**	Client ID: **MW-21-20150112-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017657**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.003865	0.00020	0.0050		77.3	70	130	0.003917	1.33	20	

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 23, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1501895

Analytical Environmental Services, Inc. received 22 samples on 1/14/2015 11:51:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501495

Date: 01/15/2015 Page 1 of 2

COMPANY: ENVIRONMENTAL RESOURCES MANAGEMENT

ADDRESS: 3200 WINDY HILL RD SE SUITE 1500 W ATLANTA, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: C.BROOKS, R.MAYETTE, A.NEAL, A.SHOREDITS, W.VIRGO

SIGNATURE:

ANALYSIS REQUESTED

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

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	REMARKS	No # of Containers
1	MW-321-20150113-01	01-13-15	08:50	X		GW	H		6
2	MW-325-20150113-01	"	09:05						6
3	MW-602-20150113-01	"	09:05						6
4	MW-306D-20150113-01	"	09:20						6
5	MW-324-20150113-01	"	10:20						6
6	MW-213-20150113-01	"	11:20						6
7	MW-608DR-20150113-01 DD	"	11:30						6
8	MW-307SAP-20150113-01	"	11:40						6
9	MW-306TZ-20150113-01	"	11:40						6
10	MW-202DR-20150113-01	"	12:25				Z	An extra 250ml bottle	11
11	MW-214-20150113-01	"	12:25					"	11
12	MW-602P-20150113-01	"	14:30					"	11
13	MW-305-20150113-01	"	15:00					"	11
14	MW-303-20150113-01	"	15:05	✓		✓	✓		10

PRESERVATION (See codes): H = HCl; NA = NaOH; N = HNO3; NaOH = NaOH; NA = NaOH; NA = NaOH; NA = NaOH

RELINQUISHED BY / DATE/TIME

1: 01/14/2015

2: 01-14-2015 11:51 AM

3:

RECEIVED BY / DATE/TIME

1: 01-14-2015 9:12AM

2: Latoya Reeves 1/14/15 11:51 a

3:

PROJECT INFORMATION

PROJECT NAME: AGLC AUGUSTA

PROJECT #: 0230712.52

SITE ADDRESS: 612 5th St. AUGUSTA, GA 30901

SEND REPORT TO: srs-grak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 108

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

STATE PROGRAM (if any):

E-mail? (Y)/N: Fax? Y/N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER

GREYHOUND OTHER

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

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

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

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

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

CHAIN OF CUSTODY

Work Order: 1501895

Date: 01/13/2015 Page 2 of 2

COMPANY:	ADDRESS:
ENVIRONMENTAL RESOURCES MANAGEMENT	3200 WENDY HILL RD SE SUITE 1500W ATLANTA, GA 30339
PHONE: (678) 486-2700	FAX:
SAMPLED BY: C. BROOKS, R. MAYETTE, A. NEAL, A. SHOREDITS, M. VIDRIO	SIGNATURE:

ANALYSIS REQUESTED

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

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	VOC (8260B)	SVOC (8270C)	TOT METALS (6010B, 7470A, 7196A)	CYANIDE (9012A)	8260B PSK-175	SULFATE (9056)	FERROUS Fe (SM3500)	CO2 + ALK	REMARKS	No # of Containers
							H / NA / N / NaOH / NA / NA / NA / NA										
1	MW-22-20150113-01	01-13-15	15:55	X		GW	Z Z 1 1 Z 1 1 1									An extra 250ml bottle	11
2	MW-31-OSRP-20150113-01	"	16:15													"	11
3	MW-33-20150113-01	"	16:17													"	11
4	MW-309BR-20150113-01	"	17:35														10
5	DUP-01-20150113-01	"	—														6 NA
6	DUP-02-20150113-01	"	—	↓		↓											11
7	TB-01	NA	—			W										5 coolers; 2 u. VOCs	2
8	TB-02	NA	—			W											2
9																	
10																	
11																	
12																	
13																	
14																	

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/14/2015 9:11	1:	01-14-2015 9:11 AM
2:	01-14-2015 11:51AM	2: Cataya Reeves	1/14/15 11:51
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AALC Augusta

PROJECT #: 0230712.52

SITE ADDRESS: 812 8th St Augusta, GA 30901

SEND REPORT TO: sreagin-irale@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 64

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

STATE PROGRAM (if any):

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

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL (COURIER)

GREYHOUND OTHER

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

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

PRESERVATIVE CODES: H+1 = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1501895

Case Narrative

Sample Receiving Nonconformance:

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. All G fraction samples were analyzed in the laboratory which is a deviation from the method.

Sample ID "DUP-02-20150113-01" is reporting with an H-Flag since there is no collection time on the COC.

PAH Analysis by Method 8270D SIM:

Due to sample matrix, samples 1501895-006B, -009B required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-321-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 8:50:00 AM
Lab ID:	1501895-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 20:43	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Surr: 4-Bromofluorobenzene	93.8	70.6-123		%REC	201848	1	01/17/2015 20:43	GK
Surr: Dibromofluoromethane	98.5	78.7-124		%REC	201848	1	01/17/2015 20:43	GK
Surr: Toluene-d8	96.7	81.3-120		%REC	201848	1	01/17/2015 20:43	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.7	0.50		ug/L	201765	1	01/19/2015 16:04	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 16:04	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 16:04	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201765	1	01/19/2015 16:04	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:06	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:35	JL
Barium	0.0606	0.0200		mg/L	201578	1	01/16/2015 22:35	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-321-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 8:50:00 AM
Lab ID:	1501895-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:35	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-325-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 22:13	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Surr: 4-Bromofluorobenzene	94.6	70.6-123		%REC	201848	1	01/17/2015 22:13	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201848	1	01/17/2015 22:13	GK
Surr: Toluene-d8	97.5	81.3-120		%REC	201848	1	01/17/2015 22:13	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 16:31	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 16:31	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 16:31	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Surr: 4-Terphenyl-d14	106	55.4-136		%REC	201765	1	01/19/2015 16:31	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:14	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:39	JL
Barium	0.0553	0.0200		mg/L	201578	1	01/16/2015 22:39	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-325-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Cadmium	0.0090	0.0050		mg/L	201578	1	01/16/2015 22:39	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Zinc	0.0573	0.0200		mg/L	201578	1	01/16/2015 22:39	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-602-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 22:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Surr: 4-Bromofluorobenzene	94	70.6-123		%REC	201848	1	01/17/2015 22:42	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/17/2015 22:42	GK
Surr: Toluene-d8	97.5	81.3-120		%REC	201848	1	01/17/2015 22:42	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 16:57	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 16:57	YH
Acenaphthene	1.6	0.50		ug/L	201765	1	01/19/2015 16:57	YH
Fluorene	0.22	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Anthracene	0.10	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Surr: 4-Terphenyl-d14	99	55.4-136		%REC	201765	1	01/19/2015 16:57	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:20	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:43	JL
Barium	0.491	0.0200		mg/L	201578	1	01/16/2015 22:43	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-602-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:43	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Copper	0.0221	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Zinc	0.165	0.0200		mg/L	201578	1	01/16/2015 22:43	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:20:00 AM
Lab ID:	1501895-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 23:12	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Surr: 4-Bromofluorobenzene	93.3	70.6-123		%REC	201848	1	01/17/2015 23:12	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/17/2015 23:12	GK
Surr: Toluene-d8	96.7	81.3-120		%REC	201848	1	01/17/2015 23:12	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 13:04	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 13:04	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 13:04	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Surr: 4-Terphenyl-d14	97.4	55.4-136		%REC	201765	1	01/19/2015 13:04	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:22	JG
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:53	JL
Barium	0.377	0.0200		mg/L	201578	1	01/16/2015 22:53	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:20:00 AM
Lab ID:	1501895-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:53	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-324-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 10:20:00 AM
Lab ID:	1501895-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 23:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201848	1	01/17/2015 23:42	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/17/2015 23:42	GK
Surr: Toluene-d8	97.6	81.3-120		%REC	201848	1	01/17/2015 23:42	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.3	0.50		ug/L	201765	1	01/18/2015 17:11	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 17:11	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 17:11	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Surr: 4-Terphenyl-d14	91.8	55.4-136		%REC	201765	1	01/18/2015 17:11	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:24	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:57	JL
Barium	0.0232	0.0200		mg/L	201578	1	01/16/2015 22:57	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-324-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 10:20:00 AM
Lab ID:	1501895-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:57	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Zinc	0.0205	0.0200		mg/L	201578	1	01/16/2015 22:57	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-213-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:20:00 AM
Lab ID:	1501895-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 00:12	GK
Benzene	8900	250		ug/L	201848	50	01/19/2015 14:06	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 00:12	GK
Ethylbenzene	1500	250		ug/L	201848	50	01/19/2015 14:06	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 00:12	GK
Toluene	460	250		ug/L	201848	50	01/19/2015 14:06	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 00:12	GK
Xylenes, Total	1300	250		ug/L	201848	50	01/19/2015 14:06	GK
Surr: 4-Bromofluorobenzene	96.7	70.6-123		%REC	201848	50	01/19/2015 14:06	GK
Surr: 4-Bromofluorobenzene	99	70.6-123		%REC	201848	1	01/18/2015 00:12	GK
Surr: Dibromofluoromethane	95.9	78.7-124		%REC	201848	50	01/19/2015 14:06	GK
Surr: Dibromofluoromethane	97.9	78.7-124		%REC	201848	1	01/18/2015 00:12	GK
Surr: Toluene-d8	95.1	81.3-120		%REC	201848	50	01/19/2015 14:06	GK
Surr: Toluene-d8	95.8	81.3-120		%REC	201848	1	01/18/2015 00:12	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	0.014	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	14000	5000		ug/L	201765	10000	01/22/2015 14:26	YH
Acenaphthylene	180	100		ug/L	201765	100	01/21/2015 18:56	YH
Acenaphthene	180	50		ug/L	201765	100	01/21/2015 18:56	YH
Fluorene	51	1.0		ug/L	201765	10	01/20/2015 15:36	YH
Phenanthrene	52	0.50		ug/L	201765	10	01/20/2015 15:36	YH
Anthracene	7.9	0.50		ug/L	201765	10	01/20/2015 15:36	YH
Fluoranthene	1.3	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Pyrene	1.3	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Benz(a)anthracene	BRL	0.50		ug/L	201765	10	01/20/2015 15:36	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Surr: 4-Terphenyl-d14	187	55.4-136	S	%REC	201765	1	01/18/2015 14:13	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:26	JG
METALS, TOTAL SW6010C				(SW3010A)				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-213-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:20:00 AM
Lab ID:	1501895-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:00	JL
Barium	0.927	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:00	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:30:00 AM
Lab ID:	1501895-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 00:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Surr: 4-Bromofluorobenzene	97	70.6-123		%REC	201848	1	01/18/2015 00:42	GK
Surr: Dibromofluoromethane	97.2	78.7-124		%REC	201848	1	01/18/2015 00:42	GK
Surr: Toluene-d8	96.4	81.3-120		%REC	201848	1	01/18/2015 00:42	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 13:30	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 13:30	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 13:30	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Surr: 4-Terphenyl-d14	91.6	55.4-136		%REC	201765	1	01/19/2015 13:30	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:28	JG
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL
Arsenic	0.429	0.0500		mg/L	201578	1	01/16/2015 23:04	JL
Barium	0.448	0.0200		mg/L	201578	1	01/16/2015 23:04	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:30:00 AM
Lab ID:	1501895-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:04	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/21/2015 20:04	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 01:12	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Surr: 4-Bromofluorobenzene	94.1	70.6-123		%REC	201848	1	01/18/2015 01:12	GK
Surr: Dibromofluoromethane	97.5	78.7-124		%REC	201848	1	01/18/2015 01:12	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201848	1	01/18/2015 01:12	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 13:56	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 13:56	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 13:56	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Surr: 4-Terphenyl-d14	101	55.4-136		%REC	201765	1	01/19/2015 13:56	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:30	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:08	JL
Barium	0.0649	0.0200		mg/L	201578	1	01/16/2015 23:08	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:08	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306TZ-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 01:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Xylenes, Total	6.8	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Surr: 4-Bromofluorobenzene	98.1	70.6-123		%REC	201848	1	01/18/2015 01:42	GK
Surr: Dibromofluoromethane	98.5	78.7-124		%REC	201848	1	01/18/2015 01:42	GK
Surr: Toluene-d8	97	81.3-120		%REC	201848	1	01/18/2015 01:42	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	240	50		ug/L	201765	100	01/21/2015 19:24	YH
Acenaphthylene	BRL	10		ug/L	201765	10	01/20/2015 16:02	YH
Acenaphthene	18	5.0		ug/L	201765	10	01/20/2015 16:02	YH
Fluorene	2.0	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Phenanthrene	0.95	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Anthracene	0.25	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Fluoranthene	0.12	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Pyrene	0.11	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Surr: 4-Terphenyl-d14	95.3	55.4-136		%REC	201765	1	01/18/2015 18:27	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:32	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:12	JL
Barium	0.735	0.0200		mg/L	201578	1	01/16/2015 23:12	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306TZ-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:12	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-202DR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 02:12	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Surr: 4-Bromofluorobenzene	96.3	70.6-123		%REC	201848	1	01/18/2015 02:12	GK
Surr: Dibromofluoromethane	98.9	78.7-124		%REC	201848	1	01/18/2015 02:12	GK
Surr: Toluene-d8	96.8	81.3-120		%REC	201848	1	01/18/2015 02:12	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	2.7	0.50		ug/L	201765	1	01/18/2015 18:53	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 18:53	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 18:53	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Surr: 4-Terphenyl-d14	93.9	55.4-136		%REC	201765	1	01/18/2015 18:53	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:34	JG
ION SCAN SW9056A								
Nitrate	0.31	0.25		mg/L	R283852	1	01/14/2015 16:49	JW
Sulfate	56	1.0		mg/L	R283852	1	01/14/2015 16:49	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-202DR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 17:52	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.27	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	196	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:16	JL
Barium	0.0536	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:16	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-214-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 02:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	201848	1	01/18/2015 02:41	GK
Surr: Dibromofluoromethane	99.3	78.7-124		%REC	201848	1	01/18/2015 02:41	GK
Surr: Toluene-d8	97.4	81.3-120		%REC	201848	1	01/18/2015 02:41	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 19:19	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 19:19	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 19:19	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Surr: 4-Terphenyl-d14	97.5	55.4-136		%REC	201765	1	01/18/2015 19:19	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:36	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 17:04	JW
Sulfate	BRL	1.0		mg/L	R283852	1	01/14/2015 17:04	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-214-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	410	20		ug/L	201752	5	01/15/2015 19:15	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	2.56	1.00		mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.17	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	108	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:19	JL
Barium	0.338	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:19	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:30:00 PM
Lab ID:	1501895-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 03:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201848	1	01/18/2015 03:11	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201848	1	01/18/2015 03:11	GK
Surr: Toluene-d8	97.1	81.3-120		%REC	201848	1	01/18/2015 03:11	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 19:46	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 19:46	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 19:46	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201765	1	01/18/2015 19:46	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:38	JG
ION SCAN SW9056A								
Nitrate	1.5	0.25		mg/L	R283852	1	01/14/2015 17:19	JW
Sulfate	56	1.0		mg/L	R283852	1	01/14/2015 17:19	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:30:00 PM
Lab ID:	1501895-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 18:02	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.79	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	144	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:23	JL
Barium	0.0768	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:23	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-315-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:00:00 PM
Lab ID:	1501895-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 03:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Surr: 4-Bromofluorobenzene	95.8	70.6-123		%REC	201848	1	01/18/2015 03:41	GK
Surr: Dibromofluoromethane	98.9	78.7-124		%REC	201848	1	01/18/2015 03:41	GK
Surr: Toluene-d8	97.2	81.3-120		%REC	201848	1	01/18/2015 03:41	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 20:12	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 20:12	RS
Acenaphthene	0.56	0.50		ug/L	201765	1	01/18/2015 20:12	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201765	1	01/18/2015 20:12	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:43	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 18:17	JW
Sulfate	5.5	1.0		mg/L	R283852	1	01/14/2015 18:17	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-315-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:00:00 PM
Lab ID:	1501895-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	60	4		ug/L	201752	1	01/15/2015 18:07	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.36	1.00		mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.68	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	77.9	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:27	JL
Barium	0.455	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:27	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-303-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:05:00 PM
Lab ID:	1501895-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 04:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Surr: 4-Bromofluorobenzene	95.2	70.6-123		%REC	201848	1	01/18/2015 04:11	GK
Surr: Dibromofluoromethane	99.1	78.7-124		%REC	201848	1	01/18/2015 04:11	GK
Surr: Toluene-d8	96	81.3-120		%REC	201848	1	01/18/2015 04:11	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 20:39	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 20:39	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 20:39	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Anthracene	0.087	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Fluoranthene	0.11	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Pyrene	0.11	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Surr: 4-Terphenyl-d14	95.4	55.4-136		%REC	201765	1	01/18/2015 20:39	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:45	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 18:32	JW
Sulfate	BRL	1.0		mg/L	R283852	1	01/14/2015 18:32	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-303-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:05:00 PM
Lab ID:	1501895-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	150	4		ug/L	201752	1	01/15/2015 18:12	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.83	1.00		mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.89	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	168	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:37	JL
Barium	0.0888	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:37	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-22-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:55:00 PM
Lab ID:	1501895-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 04:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201848	1	01/18/2015 04:41	GK
Surr: Dibromofluoromethane	99.5	78.7-124		%REC	201848	1	01/18/2015 04:41	GK
Surr: Toluene-d8	97	81.3-120		%REC	201848	1	01/18/2015 04:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	2.8	0.50		ug/L	201771	1	01/18/2015 16:13	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 16:13	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 16:13	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Surr: 4-Terphenyl-d14	94.6	55.4-136		%REC	201771	1	01/18/2015 16:13	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:47	JG
ION SCAN SW9056A								
Nitrate	0.63	0.25		mg/L	R283852	1	01/14/2015 18:47	JW
Sulfate	24	1.0		mg/L	R283852	1	01/14/2015 18:47	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-22-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:55:00 PM
Lab ID:	1501895-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 18:17	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.02	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	59.7	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:41	JL
Barium	0.0300	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:41	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:15:00 PM
Lab ID:	1501895-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 05:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Surr: 4-Bromofluorobenzene	96	70.6-123		%REC	201848	1	01/18/2015 05:11	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/18/2015 05:11	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201848	1	01/18/2015 05:11	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 16:38	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 16:38	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 16:38	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Surr: 4-Terphenyl-d14	97.8	55.4-136		%REC	201771	1	01/18/2015 16:38	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:49	JG
ION SCAN SW9056A								
Nitrate	9.8	0.25		mg/L	R283852	1	01/14/2015 19:02	JW
Sulfate	24	1.0		mg/L	R283852	1	01/14/2015 19:02	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:15:00 PM
Lab ID:	1501895-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175					**(RSK175)**			
Methane	BRL	4		ug/L	201752	1	01/15/2015 18:22	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.96	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	61.1	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C					**(SW3010A)**			
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:45	JL
Barium	0.0749	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:45	JL
Chromium	0.0117	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Nickel	0.336	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-313-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:17:00 PM
Lab ID:	1501895-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 05:40	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Surr: 4-Bromofluorobenzene	93.7	70.6-123		%REC	201848	1	01/18/2015 05:40	GK
Surr: Dibromofluoromethane	99.6	78.7-124		%REC	201848	1	01/18/2015 05:40	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201848	1	01/18/2015 05:40	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 17:03	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 17:03	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 17:03	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Surr: 4-Terphenyl-d14	98.8	55.4-136		%REC	201771	1	01/18/2015 17:03	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:51	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 19:16	JW
Sulfate	1.1	1.0		mg/L	R283852	1	01/14/2015 19:16	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-313-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:17:00 PM
Lab ID:	1501895-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	240	8		ug/L	201752	2	01/15/2015 19:19	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.42	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	73.8	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:49	JL
Barium	0.141	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:49	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Zinc	0.0564	0.0200		mg/L	201578	1	01/16/2015 23:49	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 5:35:00 PM
Lab ID:	1501895-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 06:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201848	1	01/18/2015 06:11	GK
Surr: Dibromofluoromethane	99.8	78.7-124		%REC	201848	1	01/18/2015 06:11	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201848	1	01/18/2015 06:11	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 17:28	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 17:28	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 17:28	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Surr: 4-Terphenyl-d14	101	55.4-136		%REC	201771	1	01/18/2015 17:28	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:53	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 19:31	JW
Sulfate	1.7	1.0		mg/L	R283852	1	01/14/2015 19:31	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 5:35:00 PM
Lab ID:	1501895-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	500	20		ug/L	201752	5	01/15/2015 19:24	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.188	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.21	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	104	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:52	JL
Barium	0.410	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Cadmium	0.0073	0.0050		mg/L	201578	1	01/16/2015 23:52	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Copper	0.0214	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-01-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 06:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Xylenes, Total	6.3	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Surr: 4-Bromofluorobenzene	98.2	70.6-123		%REC	201848	1	01/18/2015 06:41	GK
Surr: Dibromofluoromethane	98.9	78.7-124		%REC	201848	1	01/18/2015 06:41	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201848	1	01/18/2015 06:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	300	50		ug/L	201771	100	01/19/2015 23:54	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 17:53	YH
Acenaphthene	21	5.0		ug/L	201771	10	01/19/2015 17:23	YH
Fluorene	2.2	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Phenanthrene	1.1	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Anthracene	0.25	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Fluoranthene	0.13	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Pyrene	0.12	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201771	1	01/18/2015 17:53	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:55	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:56	JL
Barium	0.741	0.0200		mg/L	201578	1	01/16/2015 23:56	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-01-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:56	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-02-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 07:10	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Surr: 4-Bromofluorobenzene	93.9	70.6-123		%REC	201848	1	01/18/2015 07:10	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/18/2015 07:10	GK
Surr: Toluene-d8	98	81.3-120		%REC	201848	1	01/18/2015 07:10	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 18:18	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 18:18	YH
Acenaphthene	0.65	0.50		ug/L	201771	1	01/18/2015 18:18	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Surr: 4-Terphenyl-d14	103	55.4-136		%REC	201771	1	01/18/2015 18:18	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:57	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 19:46	JW
Sulfate	4.9	1.0		mg/L	R283852	1	01/14/2015 19:46	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-02-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175					**(RSK175)**			
Methane	57	4		ug/L	201752	1	01/15/2015 18:50	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.53	1.00	H	mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.01	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	69.2	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C					**(SW3010A)**			
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:16	JL
Barium	0.459	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:16	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-021	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/19/2015 15:05	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201805	1	01/19/2015 15:05	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201805	1	01/19/2015 15:05	GK
Surr: Toluene-d8	97.6	81.3-120		%REC	201805	1	01/19/2015 15:05	GK

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-02
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-022	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/19/2015 15:35	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Surr: 4-Bromofluorobenzene	94.9	70.6-123		%REC	201805	1	01/19/2015 15:35	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201805	1	01/19/2015 15:35	GK
Surr: Toluene-d8	97.6	81.3-120		%REC	201805	1	01/19/2015 15:35	GK

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501895

Checklist completed by Signature Iana Paewar Date 1/14/15

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

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

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

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

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

Cooler #1 3.1°C Cooler #2 3.2°C Cooler #3 3.5°C Cooler #4 3.1°C Cooler#5 3.4°C Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

Chain of custody agrees with sample labels? Yes ✓ No ✓ MM 1/15/15

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ MM 1/15/15 No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? Iana Checked by Dawn

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-001A	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-001B	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-001C	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-001C	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-001D	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-002A	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-002B	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-002C	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-002C	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-002D	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-003A	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-003B	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-003C	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-003C	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-003D	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-004A	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-004B	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-004C	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-004C	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-004D	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-005A	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-005B	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-005C	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-005C	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-005D	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-006A	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-006A	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/19/2015
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/21/2015
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/22/2015
1501895-006C	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-006C	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-006D	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-007A	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-007B	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-007C	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-007C	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/21/2015
1501895-007C	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-007D	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-008A	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-008B	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-008C	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-008C	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-008D	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-009A	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-009B	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-009B	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/20/2015
1501895-009B	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/21/2015
1501895-009C	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-009C	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-009D	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-010A	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-010B	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-010C	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-010D	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-010D	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-010E	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-010F	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	ION SCAN			01/14/2015
1501895-010G	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-010H	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015
1501895-010H	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-010H	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-011A	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-011B	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-011C	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-011D	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-011D	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-011E	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-011F	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	ION SCAN			01/14/2015
1501895-011G	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-011H	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015
1501895-011H	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-011H	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-012A	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-012B	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-012C	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-012D	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-012D	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-012E	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-012F	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	ION SCAN			01/14/2015
1501895-012G	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-012H	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Alkalinity			01/20/2015
1501895-012H	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-012H	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-013A	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-013B	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-013C	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-013D	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-013D	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-013E	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-013F	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	ION SCAN			01/14/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Alkalinity			01/20/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-014A	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-014B	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-014C	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-014D	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-014D	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-014E	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-014F	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	ION SCAN			01/14/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Alkalinity			01/20/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-015A	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-015B	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-015C	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-015D	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-015D	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-015E	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-015F	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	ION SCAN			01/14/2015
1501895-015G	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-015H	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Alkalinity			01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-015H	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-015H	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-016A	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-016B	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-016C	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-016D	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-016D	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-016E	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-016F	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	ION SCAN			01/14/2015
1501895-016G	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-016H	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Alkalinity			01/20/2015
1501895-016H	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-016H	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-017A	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-017B	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-017C	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-017D	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-017D	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-017E	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-017F	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	ION SCAN			01/14/2015
1501895-017G	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-017H	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Alkalinity			01/20/2015
1501895-017H	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-017H	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-018A	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-018B	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-018C	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-018D	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-018D	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-018E	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-018F	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	ION SCAN			01/14/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Alkalinity			01/20/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-019A	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-019B	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-019B	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/19/2015
1501895-019C	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-019C	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-019D	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-020A	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-020B	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-020C	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-020D	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-020D	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-020E	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00AM	01/16/2015
1501895-020F	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	ION SCAN			01/14/2015
1501895-020G	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Ferrous Iron			01/14/2015
1501895-020H	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Alkalinity			01/20/2015
1501895-020H	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-020H	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-021A	TB-01	1/13/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:41:00AM	01/19/2015
1501895-022A	TB-02	1/13/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:41:00AM	01/19/2015

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

1501895

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1501895-003D	SM4500	6	12	NaOH	19969	mL 9 Pellets	12	IP	1/14	4:42
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
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						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201578

Sample ID: **MB-201578** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018406**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201578** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018407**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9899	0.0200	1.000		99.0	80	120				
Arsenic	0.9800	0.0500	1.000		98.0	80	120				
Barium	0.9615	0.0200	1.000		96.1	80	120				
Beryllium	1.005	0.0100	1.000		100	80	120				
Cadmium	0.9900	0.0050	1.000		99.0	80	120				
Chromium	0.9878	0.0100	1.000		98.8	80	120				
Copper	1.020	0.0100	1.000		102	80	120				
Lead	0.9481	0.0100	1.000		94.8	80	120				
Nickel	0.9584	0.0200	1.000		95.8	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201578

Sample ID: **LCS-201578** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018407**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Selenium	0.9668	0.0200	1.000		96.7	80	120				
Thallium	0.9889	0.0200	1.000		98.9	80	120				
Vanadium	0.9748	0.0100	1.000		97.5	80	120				
Zinc	0.9572	0.0200	1.000		95.7	80	120				

Sample ID: **1501895-020DMS** Client ID: **DUP-02-20150113-01** Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9491	0.0200	1.000		94.9	75	125				
Arsenic	0.9564	0.0500	1.000		95.6	75	125				
Barium	1.382	0.0200	1.000	0.4593	92.3	75	125				
Beryllium	0.9616	0.0100	1.000		96.2	75	125				
Cadmium	0.9524	0.0050	1.000		95.2	75	125				
Chromium	0.9628	0.0100	1.000	0.0004570	96.2	75	125				
Copper	0.9867	0.0100	1.000		98.7	75	125				
Lead	0.8956	0.0100	1.000		89.6	75	125				
Nickel	0.8835	0.0200	1.000		88.4	75	125				
Selenium	0.9345	0.0200	1.000	0.01205	92.2	75	125				
Thallium	0.9575	0.0200	1.000		95.8	75	125				
Vanadium	0.9567	0.0100	1.000		95.7	75	125				
Zinc	0.9070	0.0200	1.000	0.006620	90.0	75	125				

Sample ID: **1501895-020DMSD** Client ID: **DUP-02-20150113-01** Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018410**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9796	0.0200	1.000		98.0	75	125	0.9491	3.17	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201578

Sample ID: **1501895-020DMSD** Client ID: **DUP-02-20150113-01** Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018410**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.9830	0.0500	1.000		98.3	75	125	0.9564	2.75	20	
Barium	1.413	0.0200	1.000	0.4593	95.4	75	125	1.382	2.18	20	
Beryllium	0.9841	0.0100	1.000		98.4	75	125	0.9616	2.32	20	
Cadmium	0.9732	0.0050	1.000		97.3	75	125	0.9524	2.16	20	
Chromium	0.9901	0.0100	1.000	0.0004570	99.0	75	125	0.9628	2.80	20	
Copper	1.011	0.0100	1.000		101	75	125	0.9867	2.47	20	
Lead	0.9189	0.0100	1.000		91.9	75	125	0.8956	2.57	20	
Nickel	0.9045	0.0200	1.000		90.4	75	125	0.8835	2.34	20	
Selenium	0.9727	0.0200	1.000	0.01205	96.1	75	125	0.9345	4.01	20	
Thallium	0.9833	0.0200	1.000		98.3	75	125	0.9575	2.65	20	
Vanadium	0.9789	0.0100	1.000		97.9	75	125	0.9567	2.29	20	
Zinc	0.9311	0.0200	1.000	0.006620	92.4	75	125	0.9070	2.62	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **MB-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013814**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013815**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	120.1	4	200.0		60.0	45.1	115				

Sample ID: **LCSD-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013816**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	117.3	4	200.0		58.7	45.1	115	120.1	2.33	20	

Sample ID: **1501604-005BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013819**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.8	4	200.0	4.107	53.3	40.4	115				

Sample ID: **1501A32-013BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019638**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	119.1	4	200.0		59.6	40.4	115				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **1501604-005BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013820**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	119.0	4	200.0	4.107	57.5	40.4	115	110.8	7.18	20	

Sample ID: **1501A32-013BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019639**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	122.2	4	200.0		61.1	40.4	115	119.1	2.55	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201761

Sample ID: **MB-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013613**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013614**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2614	0.010	0.2500		105	90	110				

Sample ID: **1501857-004BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013637**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.03630	0.010	0.2500	0.006600	11.9	90	110				S

Sample ID: **1501923-001BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013635**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2302	0.010	0.2500		92.1	90	110				

Sample ID: **1501923-001BMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013636**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2317	0.010	0.2500		92.7	90	110	0.2302	0.649	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **MB-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017697**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.222	0	2.000		61.1	55.4	136				

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.704	0.50	2.000		85.2	66.3	118				
Acenaphthylene	1.533	1.0	2.000		76.6	64	120				
Anthracene	1.723	0.050	2.000		86.1	64.6	127				
Benz(a)anthracene	1.907	0.050	2.000		95.3	60.6	137				
Benzo(a)pyrene	1.718	0.050	2.000		85.9	64	124				
Benzo(b)fluoranthene	1.924	0.10	2.000		96.2	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.675	0.10	2.000	0.01532	83.0	49.9	137				
Benzo(k)fluoranthene	1.780	0.050	2.000		89.0	61.7	137				
Chrysene	1.890	0.050	2.000		94.5	65.5	127				
Dibenz(a,h)anthracene	1.797	0.10	2.000	0.01265	89.2	52.4	130				
Fluoranthene	2.067	0.10	2.000		103	67	131				
Fluorene	1.680	0.10	2.000		84.0	68.3	120				
Indeno(1,2,3-cd)pyrene	1.746	0.050	2.000	0.01214	86.7	50.4	139				
Naphthalene	1.660	0.50	2.000		83.0	61.1	120				
Phenanthrene	1.719	0.050	2.000	0.008850	85.5	68	119				
Pyrene	1.737	0.050	2.000		86.8	62	127				
Surr: 4-Terphenyl-d14	1.820	0	2.000		91.0	55.4	136				

Sample ID: **1501859-006BMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283969**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/18/2015** Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.664	0.50	2.000		83.2	45.6	120				
Acenaphthylene	1.760	1.0	2.000	0.01176	87.4	48.3	124				
Anthracene	1.916	0.050	2.000	0.02359	94.6	57.7	124				
Benz(a)anthracene	2.526	0.050	2.000		126	50.3	143				
Benzo(a)pyrene	1.657	0.050	2.000		82.9	44.2	127				
Benzo(b)fluoranthene	3.288	0.10	2.000		164	48.4	125				S
Benzo(g,h,i)perylene	1.665	0.10	2.000		83.2	40.2	122				
Benzo(k)fluoranthene	1.508	0.050	2.000		75.4	45.5	122				
Chrysene	1.717	0.050	2.000		85.9	46	124				
Dibenz(a,h)anthracene	1.993	0.10	2.000		99.7	40.1	128				
Fluoranthene	2.002	0.10	2.000	0.01522	99.3	58	127				
Fluorene	1.747	0.10	2.000	0.01972	86.4	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **1501859-006BMS**	Client ID:		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.991	0.050	2.000		99.5	40.3	129				
Naphthalene	1.643	0.50	2.000	0.02433	80.9	46.6	120				
Phenanthrene	1.697	0.050	2.000	0.01126	84.3	50.6	122				
Pyrene	1.799	0.050	2.000	0.04382	87.8	50.1	128				
Surr: 4-Terphenyl-d14	1.916	0	2.000		95.8	55.4	136				

Sample ID: **1501859-006BMSD**	Client ID:		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019921**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.829	0.50	2.000		91.5	45.6	120	1.664	9.44	29.4	
Acenaphthylene	1.943	1.0	2.000	0.01176	96.6	48.3	124	1.760	9.89	32.5	
Anthracene	2.068	0.050	2.000	0.02359	102	57.7	124	1.916	7.63	21.9	
Benz(a)anthracene	2.738	0.050	2.000		137	50.3	143	2.526	8.06	26.8	
Benzo(a)pyrene	1.776	0.050	2.000		88.8	44.2	127	1.657	6.92	40.9	
Benzo(b)fluoranthene	3.674	0.10	2.000		184	48.4	125	3.288	11.1	24.2	S
Benzo(g,h,i)perylene	1.799	0.10	2.000		90.0	40.2	122	1.665	7.77	26.2	
Benzo(k)fluoranthene	1.620	0.050	2.000		81.0	45.5	122	1.508	7.10	23.3	
Chrysene	1.880	0.050	2.000		94.0	46	124	1.717	9.06	25	
Dibenz(a,h)anthracene	2.135	0.10	2.000		107	40.1	128	1.993	6.88	23.6	
Fluoranthene	2.173	0.10	2.000	0.01522	108	58	127	2.002	8.22	23.5	
Fluorene	1.928	0.10	2.000	0.01972	95.4	52.6	124	1.747	9.84	31.5	
Indeno(1,2,3-cd)pyrene	2.131	0.050	2.000		107	40.3	129	1.991	6.82	28.8	
Naphthalene	1.788	0.50	2.000	0.02433	88.2	46.6	120	1.643	8.47	22.9	
Phenanthrene	1.867	0.050	2.000	0.01126	92.8	50.6	122	1.697	9.54	20.2	
Pyrene	1.962	0.050	2.000	0.04382	95.9	50.1	128	1.799	8.65	24.7	
Surr: 4-Terphenyl-d14	2.060	0	2.000		103	55.4	136	1.916	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **MB-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017084**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	2.051	0	2.000		103	55.4	136				

Sample ID: **LCS-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.615	0.50	2.000		80.7	66.3	118				
Acenaphthylene	1.412	1.0	2.000		70.6	64	120				
Anthracene	1.567	0.050	2.000		78.3	64.6	127				
Benz(a)anthracene	1.684	0.050	2.000		84.2	60.6	137				
Benzo(a)pyrene	1.620	0.050	2.000		81.0	64	124				
Benzo(b)fluoranthene	1.994	0.10	2.000		99.7	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **LCS-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.879	0.10	2.000		93.9	49.9	137				
Benzo(k)fluoranthene	1.696	0.050	2.000		84.8	61.7	137				
Chrysene	1.755	0.050	2.000		87.7	65.5	127				
Dibenz(a,h)anthracene	1.928	0.10	2.000		96.4	52.4	130				
Fluoranthene	1.758	0.10	2.000		87.9	67	131				
Fluorene	1.609	0.10	2.000		80.5	68.3	120				
Indeno(1,2,3-cd)pyrene	1.863	0.050	2.000		93.1	50.4	139				
Naphthalene	1.550	0.50	2.000		77.5	61.1	120				
Phenanthrene	1.653	0.050	2.000		82.6	68	119				
Pyrene	1.681	0.050	2.000		84.0	62	127				
Surr: 4-Terphenyl-d14	1.781	0	2.000		89.0	55.4	136				

Sample ID: **1501A32-013CMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.525	0.50	2.000		76.2	45.6	120				
Acenaphthylene	1.303	1.0	2.000		65.1	48.3	124				
Anthracene	1.448	0.050	2.000		72.4	57.7	124				
Benz(a)anthracene	1.462	0.050	2.000	0.01370	72.4	50.3	143				
Benzo(a)pyrene	1.499	0.050	2.000	0.01619	74.2	44.2	127				
Benzo(b)fluoranthene	1.875	0.10	2.000	0.02263	92.6	48.4	125				
Benzo(g,h,i)perylene	1.815	0.10	2.000	0.03551	89.0	40.2	122				
Benzo(k)fluoranthene	1.724	0.050	2.000	0.01689	85.4	45.5	122				
Chrysene	1.674	0.050	2.000	0.01554	82.9	46	124				
Dibenz(a,h)anthracene	1.734	0.10	2.000	0.02836	85.3	40.1	128				
Fluoranthene	1.620	0.10	2.000	0.01414	80.3	58	127				
Fluorene	1.497	0.10	2.000		74.8	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **1501A32-013CMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.776	0.050	2.000	0.02686	87.5	40.3	129				
Naphthalene	1.598	0.50	2.000	0.1289	73.5	46.6	120				
Phenanthrene	1.550	0.050	2.000	0.01511	76.8	50.6	122				
Pyrene	1.613	0.050	2.000		80.6	50.1	128				
Surr: 4-Terphenyl-d14	1.597	0	2.000		79.9	55.4	136				

Sample ID: **1501A32-013CMSD** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017101**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.451	0.50	2.000		72.5	45.6	120	1.525	4.98	29.4	
Acenaphthylene	1.230	1.0	2.000		61.5	48.3	124	1.303	5.79	32.5	
Anthracene	1.412	0.050	2.000		70.6	57.7	124	1.448	2.56	21.9	
Benz(a)anthracene	1.493	0.050	2.000	0.01370	73.9	50.3	143	1.462	2.06	26.8	
Benzo(a)pyrene	1.445	0.050	2.000	0.01619	71.5	44.2	127	1.499	3.66	40.9	
Benzo(b)fluoranthene	1.808	0.10	2.000	0.02263	89.3	48.4	125	1.875	3.61	24.2	
Benzo(g,h,i)perylene	1.640	0.10	2.000	0.03551	80.2	40.2	122	1.815	10.2	26.2	
Benzo(k)fluoranthene	1.638	0.050	2.000	0.01689	81.1	45.5	122	1.724	5.11	23.3	
Chrysene	1.675	0.050	2.000	0.01554	83.0	46	124	1.674	0.033	25	
Dibenz(a,h)anthracene	1.636	0.10	2.000	0.02836	80.4	40.1	128	1.734	5.85	23.6	
Fluoranthene	1.604	0.10	2.000	0.01414	79.5	58	127	1.620	1.01	23.5	
Fluorene	1.439	0.10	2.000		71.9	52.6	124	1.497	3.94	31.5	
Indeno(1,2,3-cd)pyrene	1.645	0.050	2.000	0.02686	80.9	40.3	129	1.776	7.67	28.8	
Naphthalene	1.474	0.50	2.000	0.1289	67.2	46.6	120	1.598	8.11	22.9	
Phenanthrene	1.524	0.050	2.000	0.01511	75.4	50.6	122	1.550	1.74	20.2	
Pyrene	1.553	0.050	2.000		77.6	50.1	128	1.613	3.79	24.7	
Surr: 4-Terphenyl-d14	1.616	0	2.000		80.8	55.4	136	1.597	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **MB-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014981**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	42.70	0	50.00		85.4	70.6	123				
Surr: Dibromofluoromethane	54.98	0	50.00		110	78.7	124				
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120				

Sample ID: **LCS-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.66	5.0	50.00		93.3	72.8	128				
Toluene	46.50	5.0	50.00		93.0	74.9	127				
Trichloroethene	49.63	5.0	50.00		99.3	70.5	134				
Surr: 4-Bromofluorobenzene	40.51	0	50.00		81.0	70.6	123				
Surr: Dibromofluoromethane	50.05	0	50.00		100	78.7	124				
Surr: Toluene-d8	46.15	0	50.00		92.3	81.3	120				

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.43	5.0	50.00		105	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **1501934-001AMS**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283753**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201805**		Analysis Date: **01/16/2015**		Seq No: **6016673**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Toluene	51.66	5.0	50.00		103	70.5	137			
Trichloroethene	52.57	5.0	50.00		105	71.8	139			
Surr: 4-Bromofluorobenzene	37.51	0	50.00		75.0	70.6	123			
Surr: Dibromofluoromethane	48.86	0	50.00		97.7	78.7	124			
Surr: Toluene-d8	47.61	0	50.00		95.2	81.3	120			

Sample ID: **1501934-001AMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283753**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201805**		Analysis Date: **01/16/2015**		Seq No: **6016674**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Benzene	53.44	5.0	50.00		107	70	135	52.43	1.91	20
Toluene	52.74	5.0	50.00		105	70.5	137	51.66	2.07	20
Trichloroethene	53.90	5.0	50.00		108	71.8	139	52.57	2.50	20
Surr: 4-Bromofluorobenzene	37.47	0	50.00		74.9	70.6	123	37.51	0	0
Surr: Dibromofluoromethane	49.24	0	50.00		98.5	78.7	124	48.86	0	0
Surr: Toluene-d8	45.13	0	50.00		90.3	81.3	120	47.61	0	0

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201824

Sample ID: **MB-201824**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017914**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201824**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017915**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004957	0.00020	0.0050		99.1	80	120				

Sample ID: **1501895-001CMS**	Client ID: **MW-321-20150113-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017917**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004882	0.00020	0.0050		97.6	70	130				

Sample ID: **1501895-001CMSD**	Client ID: **MW-321-20150113-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017918**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005067	0.00020	0.0050		101	70	130	0.004882	3.70	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201831

Sample ID: **MB-201831**	Client ID:			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6015967**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201831**	Client ID:			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6015968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2473	0.010	0.2500		98.9	90	110				

Sample ID: **1501895-010EMS**	Client ID: **MW-202DR-20150113-01**			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6016007**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2686	0.010	0.2500		107	90	110				

Sample ID: **1501895-020EMS**	Client ID: **DUP-02-20150113-01**			Units: **mg/L**	Prep Date: **01/16/2015**	Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6016010**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2605	0.010	0.2500	0.007500	101	90	110				

Sample ID: **1501895-010EMSD**	Client ID: **MW-202DR-20150113-01**			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6016009**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2680	0.010	0.2500		107	90	110	0.2686	0.224	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201848

Sample ID: **MB-201848** Client ID: Units: **ug/L** Prep Date: **01/17/2015** Run No: **283838**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201848** Analysis Date: **01/17/2015** Seq No: **6016643**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.27	0	50.00		94.5	70.6	123				
Surr: Dibromofluoromethane	48.93	0	50.00		97.9	78.7	124				
Surr: Toluene-d8	48.18	0	50.00		96.4	81.3	120				

Sample ID: **LCS-201848** Client ID: Units: **ug/L** Prep Date: **01/17/2015** Run No: **283838**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201848** Analysis Date: **01/17/2015** Seq No: **6016642**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.99	5.0	50.00		94.0	72.8	128				
Toluene	46.86	5.0	50.00		93.7	74.9	127				
Trichloroethene	48.44	5.0	50.00		96.9	70.5	134				
Surr: 4-Bromofluorobenzene	47.45	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	48.69	0	50.00		97.4	78.7	124				
Surr: Toluene-d8	48.05	0	50.00		96.1	81.3	120				

Sample ID: **1501895-001AMS** Client ID: **MW-321-20150113-01** Units: **ug/L** Prep Date: **01/17/2015** Run No: **283838**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201848** Analysis Date: **01/17/2015** Seq No: **6016645**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.08	5.0	50.00		94.2	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201848

Sample ID: **1501895-001AMS**	Client ID: **MW-321-20150113-01**	Units: **ug/L**	Prep Date: **01/17/2015**	Run No: **283838**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201848**	Analysis Date: **01/17/2015**	Seq No: **6016645**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	46.92	5.0	50.00		93.8	70.5	137				
Trichloroethene	47.86	5.0	50.00		95.7	71.8	139				
Surr: 4-Bromofluorobenzene	47.45	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	49.74	0	50.00		99.5	78.7	124				
Surr: Toluene-d8	48.75	0	50.00		97.5	81.3	120				

Sample ID: **1501895-001AMSD**	Client ID: **MW-321-20150113-01**	Units: **ug/L**	Prep Date: **01/17/2015**	Run No: **283838**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201848**	Analysis Date: **01/17/2015**	Seq No: **6016646**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.76	5.0	50.00		93.5	70	135	47.08	0.682	20	
Toluene	47.15	5.0	50.00		94.3	70.5	137	46.92	0.489	20	
Trichloroethene	47.19	5.0	50.00		94.4	71.8	139	47.86	1.41	20	
Surr: 4-Bromofluorobenzene	48.35	0	50.00		96.7	70.6	123	47.45	0	0	
Surr: Dibromofluoromethane	49.09	0	50.00		98.2	78.7	124	49.74	0	0	
Surr: Toluene-d8	48.54	0	50.00		97.1	81.3	120	48.75	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283659

Sample ID: **MB-R283659** Client ID: Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **MBLK** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012390**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283659** Client ID: Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **LCS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012391**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5297	0.100	0.5000		106	85	115				

Sample ID: **1501895-010GMS** Client ID: **MW-202DR-20150113-01** Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **MS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012400**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5187	0.100	0.5000		104	80	120				

Sample ID: **1501895-010GMSD** Client ID: **MW-202DR-20150113-01** Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **MSD** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012401**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5078	0.100	0.5000		102	80	120	0.5187	2.12	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283852

Sample ID: **MB-R283852**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016991**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R283852**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016989**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.977	0.25	5.000		99.5	90	110				
Sulfate	23.25	1.0	25.00		93.0	90	110				

Sample ID: **1501912-002BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016996**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	58.45	2.5	50.00	5.888	105	90	110				
Sulfate	299.3	10	250.0	43.27	102	90	110				

Sample ID: **1501913-002BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6017000**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	56.75	2.5	50.00	6.649	100	90	110				
Sulfate	293.7	10	250.0	40.26	101	90	110				

Sample ID: **1501912-002BMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016997**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.57	2.5	50.00	5.888	111	90	110	58.45	5.19	20	S

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283852

Sample ID: **1501912-002BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date:
BatchID: **R283852** Analysis Date: **01/14/2015**
Run No: **283852**
Seq No: **6016997**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	314.8	10	250.0	43.27	109	90	110	299.3	5.05	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283916

Sample ID: **MB-R283916**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **283916**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R283916**	Analysis Date: **01/19/2015**		Seq No: **6018208**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501895-010HDUP**	Client ID: **MW-202DR-20150113-01**			Units: **mg/L**	Prep Date:		Run No: **283916**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R283916**	Analysis Date: **01/19/2015**		Seq No: **6018219**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	8.280	1.00						8.270	0.121	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 26, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501A32

Analytical Environmental Services, Inc. received 22 samples on 1/15/2015 11:57:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501A32

Date: 01/14/2015 Page 1 of 2

COMPANY: ENVIRONMENTAL RESOURCES MANAGEMENT

ADDRESS: 3200 WINDY HILL RD SE SUITE 1500 W ATLANTA, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: C. BROCKS, R. MAYETTE, A. NEAL, A. SHOEBOTS, W. VIRGO

SIGNATURE:

ANALYSIS REQUESTED

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

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	VOC (8260B)	SVOC (8270C)	TOT. METALS+Hg (6010B, 7470A, 7196A)	CYANIDE (9012A)	GASES RSK-175	FERROUS Fe (SM 3500)	SULFATE+NITRATE (300.0)	[redacted]	8270 SIM	REMARKS	No # of Containers
1	MW-306SAP-20150114-01	01/14/2015	8:55	X		GW	H	2	2	1	1							6
2	MW-504BR-20150114-01	"	8:58															6
3	MW-511BR-20150114-01	"	9:05															6
4	MW-500BR-20150114-01	"	9:45															6
5	MW-602-20150114-01	"	10:00															6
6	MW-510BR-20150114-01	"	10:35															6
7	MW-306BR-20150114-01	"	10:50															6
8	MW-601-20150114-01	"	11:10															6
9	MW-513BR-20150114-01	"	11:16															6
10	MW-12-20150114-01	"	12:23				NA					2	1	1				10
11	MW-401D-20150114-01	"	12:25									1		1	1			11
12	MW-206-20150114-01	"	12:25															11
13	MW-319-20150114-01	"	12:35															11
14	MW-318-20150114-01	"	12:45															10

RELINQUISHED BY / DATE/TIME

1: 01/15/2015 9:21

2: 01-15-2015 11:57AM

3:

RECEIVED BY / DATE/TIME

1: 01-15-15 9:21am

2: Cataja Reeves 1/15/15 11:57a

3:

PROJECT INFORMATION

PROJECT NAME: ACC ATLANTA

PROJECT #: 0230712.52

SITE ADDRESS: 512 87th St Atlanta, GA 30901

SEND REPORT TO: [redacted]@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 107

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

STATE PROGRAM (if any):

E-mail? (Y) N: Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL (COURIER)

GREYHOUND OTHER

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

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

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

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 15D1A32

Date: 01/14/2015 Page 2 of 2

COMPANY:	ADDRESS:
ENVIRONMENTAL RESOURCES MANAGEMENT	3200 WINDY HILL RD SE SUITE 1500W ATLANTA, GA 30339
PHONE: (678) 486-2700	FAX:
SAMPLED BY: C. BROOKS, R. MAYETTE, L. NEAL, A. SHOREDITS, W. VIRGO	SIGNATURE:

ANALYSIS REQUESTED

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

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC (8260B)	SVOC (8270C)	TOT. HEPTANE HS (6010B, 6020B, HydroD)	CYANIDE (9012A)	GASES RSK-175	FERROUS Fe (SM3500)	SULFATE + NITRATE (9056)	[redacted]	CO2 + O2 + CP	REMARKS	No # of Containers
	PRESERVATION (See codes)																
1	MW-203-20150114-01	01/14/2015	15:50	X		GW	2	2	1	1	2	1	1	1			11
2	MW-512B2-20150114-01	-11-	16:20	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			11
3	MW-404PR-20150114-01	-11-	16:30											↓			4
4	MW-19-20150114-01	-11-	16:45														10
5	MW-401SAP-20150114-01	-11-	17:25														10
6	DUP-03-20150114-01	~~01/14~~ -11-	NA	↓		↓	↓	↓	↓	↓	↓	↓	↓					10
7	TB-01	NA	NA			W	2									6 coolers, 2 w/ VOA's		2
8	TB-02	NA	NA			W	2											2
9	MW-319-20150115-01	01/15/2015	8:30	X		GW	2	2	1	1	2	1	1			[redacted] MD		10
10																		
11																		
12																		
13																		
14																		

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/15/2015 09:21	1:	01-15-2015 9:21AM
2: 01-15-15 12:30AM		2: Georgia Reeves	1/15/15 11:57a
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGC Augusta
PROJECT #: 0230712.52
SITE ADDRESS: 812 8th St Augusta GA 30901
SEND REPORT TO: greg.jirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers: 67

Turnaround Time Request: +10 / 77
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

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

SPECIAL INSTRUCTIONS/COMMENTS:

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

SAMPLES RECEIVED AFTER 5PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

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

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501A32

Case Narrative

Sample ID "TB-02" was listed on the COC, but was not received. Andreas Shoredits was notified on 1/16/15.

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. F fraction samples were analyzed in the laboratory which is a deviation from the method.

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1501A32-004A, -005A, & -008A required dilution during preparation and analysis resulting in elevated reporting limits.

PAH Analysis by Method 8270D SIM:

Due to sample matrix, sample 1501A32-014C required dilution during preparation and/or analysis resulting in elevated reporting limits.

Sample "MW-319-20150115-01" was not analyzed for MS/MSD per Donald Dowling on 1/20/15.

Sample ID "DUP-03-20150114-01" is reporting with an H-Flag since there is no collection time on the COC.

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:55:00 AM
Lab ID:	1501A32-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 13:20	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Surr: 4-Bromofluorobenzene	95.5	70.6-123		%REC	201897	1	01/20/2015 13:20	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201897	1	01/20/2015 13:20	GK
Surr: Toluene-d8	96.9	81.3-120		%REC	201897	1	01/20/2015 13:20	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.010	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	0.66	0.50		ug/L	201771	1	01/18/2015 18:43	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 18:43	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 18:43	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Surr: 4-Terphenyl-d14	106	55.4-136		%REC	201771	1	01/18/2015 18:43	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:18	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:13	JL
Barium	0.648	0.0200		mg/L	201985	1	01/22/2015 23:13	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:55:00 AM
Lab ID:	1501A32-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:13	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Nickel	0.151	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-504BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:58:00 AM
Lab ID:	1501A32-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 13:50	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Surr: 4-Bromofluorobenzene	94.9	70.6-123		%REC	201897	1	01/20/2015 13:50	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 13:50	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201897	1	01/20/2015 13:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.021	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	0.65	0.50		ug/L	201771	1	01/18/2015 19:08	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 19:08	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 19:08	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Phenanthrene	0.088	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Surr: 4-Terphenyl-d14	58.4	55.4-136		%REC	201771	1	01/18/2015 19:08	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:29	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:17	JL
Barium	0.184	0.0200		mg/L	201985	1	01/22/2015 23:17	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-504BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:58:00 AM
Lab ID:	1501A32-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:17	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Zinc	0.121	0.0200		mg/L	201985	1	01/22/2015 23:17	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-511BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:05:00 AM
Lab ID:	1501A32-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:38	NP
Benzene	450	50		ug/L	201897	10	01/20/2015 11:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Ethylbenzene	17	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Toluene	35	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Xylenes, Total	12	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Surr: 4-Bromofluorobenzene	91.9	70.6-123		%REC	201897	1	01/20/2015 15:38	NP
Surr: 4-Bromofluorobenzene	95.8	70.6-123		%REC	201897	10	01/20/2015 11:50	GK
Surr: Dibromofluoromethane	98.4	78.7-124		%REC	201897	10	01/20/2015 11:50	GK
Surr: Dibromofluoromethane	105	78.7-124		%REC	201897	1	01/20/2015 15:38	NP
Surr: Toluene-d8	91.8	81.3-120		%REC	201897	1	01/20/2015 15:38	NP
Surr: Toluene-d8	96.6	81.3-120		%REC	201897	10	01/20/2015 11:50	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	150	50		ug/L	201771	100	01/22/2015 15:47	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 19:34	YH
Acenaphthene	3.3	0.50		ug/L	201771	1	01/18/2015 19:34	YH
Fluorene	0.89	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Phenanthrene	0.76	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Anthracene	0.081	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Pyrene	0.055	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201771	1	01/18/2015 19:34	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:31	TA
METALS, TOTAL SW6010C				(SW3010A)				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-511BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:05:00 AM
Lab ID:	1501A32-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:21	JL
Barium	0.0678	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:21	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-500BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:45:00 AM
Lab ID:	1501A32-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	5000		ug/L	201897	100	01/20/2015 09:20	GK
Benzene	13000	500		ug/L	201897	100	01/20/2015 09:20	GK
Carbon disulfide	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Ethylbenzene	1200	500		ug/L	201897	100	01/20/2015 09:20	GK
Methylene chloride	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Toluene	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Trichloroethene	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Xylenes, Total	610	500		ug/L	201897	100	01/20/2015 09:20	GK
Surr: 4-Bromofluorobenzene	96	70.6-123		%REC	201897	100	01/20/2015 09:20	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201897	100	01/20/2015 09:20	GK
Surr: Toluene-d8	95.7	81.3-120		%REC	201897	100	01/20/2015 09:20	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	2800	500		ug/L	201771	1000	01/20/2015 19:06	YH
Acenaphthylene	1.2	1.0		ug/L	201771	1	01/18/2015 19:59	YH
Acenaphthene	86	5.0		ug/L	201771	10	01/19/2015 17:49	YH
Fluorene	14	1.0		ug/L	201771	10	01/19/2015 17:49	YH
Phenanthrene	12	0.50		ug/L	201771	10	01/19/2015 17:49	YH
Anthracene	1.6	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Fluoranthene	0.51	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Pyrene	0.59	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Surr: 4-Terphenyl-d14	96.1	55.4-136		%REC	201771	1	01/18/2015 19:59	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:33	TA
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:25	JL
Barium	0.364	0.0200		mg/L	201985	1	01/22/2015 23:25	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-500BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:45:00 AM
Lab ID:	1501A32-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:25	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Zinc	0.0686	0.0200		mg/L	201985	1	01/22/2015 23:25	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-600-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:00:00 AM
Lab ID:	1501A32-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	25000		ug/L	201897	500	01/20/2015 08:50	GK
Benzene	25000	2500		ug/L	201897	500	01/20/2015 08:50	GK
Carbon disulfide	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Ethylbenzene	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Methylene chloride	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Toluene	8500	2500		ug/L	201897	500	01/20/2015 08:50	GK
Trichloroethene	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Xylenes, Total	2600	2500		ug/L	201897	500	01/20/2015 08:50	GK
Surr: 4-Bromofluorobenzene	95.7	70.6-123		%REC	201897	500	01/20/2015 08:50	GK
Surr: Dibromofluoromethane	99.4	78.7-124		%REC	201897	500	01/20/2015 08:50	GK
Surr: Toluene-d8	94.8	81.3-120		%REC	201897	500	01/20/2015 08:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5400	500		ug/L	201771	1000	01/20/2015 19:33	YH
Acenaphthylene	120	100		ug/L	201771	100	01/20/2015 00:47	YH
Acenaphthene	14	5.0		ug/L	201771	10	01/19/2015 18:15	YH
Fluorene	20	1.0		ug/L	201771	10	01/19/2015 18:15	YH
Phenanthrene	15	0.50		ug/L	201771	10	01/19/2015 18:15	YH
Anthracene	2.4	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Fluoranthene	1.2	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Pyrene	1.8	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Benz(a)anthracene	0.38	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Chrysene	0.30	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(b)fluoranthene	0.28	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(k)fluoranthene	0.085	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(a)pyrene	0.30	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Indeno(1,2,3-cd)pyrene	0.11	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(g,h,i)perylene	0.16	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Surr: 4-Terphenyl-d14	87.3	55.4-136		%REC	201771	1	01/18/2015 20:25	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:35	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:28	JL
Barium	0.157	0.0200		mg/L	201985	1	01/22/2015 23:28	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-600-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:00:00 AM
Lab ID:	1501A32-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:28	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Copper	0.0312	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Zinc	0.208	0.0200		mg/L	201985	1	01/22/2015 23:28	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-510BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:35:00 AM
Lab ID:	1501A32-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:07	NP
Benzene	1100	250		ug/L	201897	50	01/20/2015 10:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Ethylbenzene	180	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Toluene	190	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Xylenes, Total	200	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Surr: 4-Bromofluorobenzene	95.1	70.6-123		%REC	201897	50	01/20/2015 10:20	GK
Surr: 4-Bromofluorobenzene	105	70.6-123		%REC	201897	1	01/20/2015 16:07	NP
Surr: Dibromofluoromethane	99.9	78.7-124		%REC	201897	50	01/20/2015 10:20	GK
Surr: Dibromofluoromethane	104	78.7-124		%REC	201897	1	01/20/2015 16:07	NP
Surr: Toluene-d8	95.6	81.3-120		%REC	201897	50	01/20/2015 10:20	GK
Surr: Toluene-d8	93	81.3-120		%REC	201897	1	01/20/2015 16:07	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	300	50		ug/L	201771	100	01/20/2015 01:13	YH
Acenaphthylene	2.7	1.0		ug/L	201771	1	01/18/2015 20:50	YH
Acenaphthene	7.8	0.50		ug/L	201771	1	01/18/2015 20:50	YH
Fluorene	4.7	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Phenanthrene	5.6	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Anthracene	0.86	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Fluoranthene	0.78	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Pyrene	0.97	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Benz(a)anthracene	0.17	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Chrysene	0.14	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(b)fluoranthene	0.13	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(a)pyrene	0.13	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Indeno(1,2,3-cd)pyrene	0.058	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Surr: 4-Terphenyl-d14	74	55.4-136		%REC	201771	1	01/18/2015 20:50	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:37	TA
METALS, TOTAL SW6010C				**(SW3010A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-510BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:35:00 AM
Lab ID:	1501A32-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:32	JL
Barium	0.109	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:32	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Zinc	0.0939	0.0200		mg/L	201985	1	01/22/2015 23:32	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:50:00 AM
Lab ID:	1501A32-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:09	NP
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Surr: 4-Bromofluorobenzene	82.5	70.6-123		%REC	201897	1	01/20/2015 15:09	NP
Surr: Dibromofluoromethane	108	78.7-124		%REC	201897	1	01/20/2015 15:09	NP
Surr: Toluene-d8	98.8	81.3-120		%REC	201897	1	01/20/2015 15:09	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 21:15	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 21:15	YH
Acenaphthene	5.3	0.50		ug/L	201771	1	01/18/2015 21:15	YH
Fluorene	0.59	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Anthracene	0.062	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Surr: 4-Terphenyl-d14	100	55.4-136		%REC	201771	1	01/18/2015 21:15	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:39	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:36	JL
Barium	0.535	0.0200		mg/L	201985	1	01/22/2015 23:36	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:50:00 AM
Lab ID:	1501A32-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:36	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-601-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:10:00 AM
Lab ID:	1501A32-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	5000		ug/L	201897	100	01/20/2015 09:50	GK
Benzene	6900	500		ug/L	201897	100	01/20/2015 09:50	GK
Carbon disulfide	BRL	500		ug/L	201897	100	01/20/2015 09:50	GK
Ethylbenzene	960	500		ug/L	201897	100	01/20/2015 09:50	GK
Methylene chloride	BRL	500		ug/L	201897	100	01/20/2015 09:50	GK
Toluene	2100	500		ug/L	201897	100	01/20/2015 09:50	GK
Trichloroethene	BRL	500		ug/L	201897	100	01/20/2015 09:50	GK
Xylenes, Total	1900	500		ug/L	201897	100	01/20/2015 09:50	GK
Surr: 4-Bromofluorobenzene	95.9	70.6-123		%REC	201897	100	01/20/2015 09:50	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	100	01/20/2015 09:50	GK
Surr: Toluene-d8	95.8	81.3-120		%REC	201897	100	01/20/2015 09:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.022	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	6500	500		ug/L	201771	1000	01/21/2015 22:56	YH
Acenaphthylene	45	10		ug/L	201771	10	01/19/2015 19:04	YH
Acenaphthene	12	5.0		ug/L	201771	10	01/19/2015 19:04	YH
Fluorene	36	1.0		ug/L	201771	10	01/19/2015 19:04	YH
Phenanthrene	17	0.50		ug/L	201771	10	01/19/2015 19:04	YH
Anthracene	4.4	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Fluoranthene	0.49	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Pyrene	0.47	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Surr: 4-Terphenyl-d14	91.5	55.4-136		%REC	201771	1	01/18/2015 21:41	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:41	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:40	JL
Barium	0.275	0.0200		mg/L	201985	1	01/22/2015 23:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-601-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:10:00 AM
Lab ID:	1501A32-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:40	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Zinc	0.0379	0.0200		mg/L	201985	1	01/22/2015 23:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-513BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:15:00 AM
Lab ID:	1501A32-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 14:20	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201897	1	01/20/2015 14:20	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 14:20	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201897	1	01/20/2015 14:20	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 22:06	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 22:06	YH
Acenaphthene	1.3	0.50		ug/L	201771	1	01/18/2015 22:06	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Anthracene	0.082	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Surr: 4-Terphenyl-d14	97.5	55.4-136		%REC	201771	1	01/18/2015 22:06	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:43	TA
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:44	JL
Barium	0.711	0.0200		mg/L	201985	1	01/22/2015 23:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-513BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:15:00 AM
Lab ID:	1501A32-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:44	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Zinc	0.0224	0.0200		mg/L	201985	1	01/22/2015 23:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-12-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:23:00 PM
Lab ID:	1501A32-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:05	NP
Benzene	3500	250		ug/L	201897	50	01/20/2015 10:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:05	NP
Ethylbenzene	930	250		ug/L	201897	50	01/20/2015 10:50	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:05	NP
Toluene	720	250		ug/L	201897	50	01/20/2015 10:50	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 17:05	NP
Xylenes, Total	940	250		ug/L	201897	50	01/20/2015 10:50	GK
Surr: 4-Bromofluorobenzene	97.4	70.6-123		%REC	201897	50	01/20/2015 10:50	GK
Surr: 4-Bromofluorobenzene	109	70.6-123		%REC	201897	1	01/20/2015 17:05	NP
Surr: Dibromofluoromethane	98.2	78.7-124		%REC	201897	50	01/20/2015 10:50	GK
Surr: Dibromofluoromethane	95.6	78.7-124		%REC	201897	1	01/20/2015 17:05	NP
Surr: Toluene-d8	96.5	81.3-120		%REC	201897	50	01/20/2015 10:50	GK
Surr: Toluene-d8	93.5	81.3-120		%REC	201897	1	01/20/2015 17:05	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	3700	500		ug/L	201771	1000	01/21/2015 22:29	YH
Acenaphthylene	1.7	1.0		ug/L	201771	1	01/18/2015 22:32	YH
Acenaphthene	69	5.0		ug/L	201771	10	01/19/2015 19:31	YH
Fluorene	18	1.0		ug/L	201771	10	01/19/2015 19:31	YH
Phenanthrene	11	0.50		ug/L	201771	10	01/19/2015 19:31	YH
Anthracene	1.5	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Fluoranthene	0.26	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Pyrene	0.23	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Surr: 4-Terphenyl-d14	99.7	55.4-136		%REC	201771	1	01/18/2015 22:32	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:45	TA
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-12-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:23:00 PM
Lab ID:	1501A32-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 20:36	JW
Sulfate	BRL	1.0		mg/L	R283938	1	01/15/2015 20:36	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	3000	80		ug/L	201752	20	01/15/2015 20:02	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.66	1.00		mg/L	R283868	10	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	3.02	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	251	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:48	JL
Barium	0.231	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:48	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401D-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 14:55	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Trichloroethene	18	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Surr: 4-Bromofluorobenzene	94.1	70.6-123		%REC	201897	1	01/20/2015 14:55	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 14:55	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201897	1	01/20/2015 14:55	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.1	0.50		ug/L	201771	1	01/18/2015 22:57	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 22:57	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 22:57	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Surr: 4-Terphenyl-d14	112	55.4-136		%REC	201771	1	01/18/2015 22:57	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:51	TA
ION SCAN SW9056A								
Nitrate	0.74	0.25		mg/L	R283938	1	01/15/2015 20:50	JW
Sulfate	130	2.0		mg/L	R283938	2	01/16/2015 11:00	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401D-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 19:33	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	9.09	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	95.9	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:58	JL
Barium	0.0847	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Cadmium	0.0358	0.0050		mg/L	201985	1	01/22/2015 23:58	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Zinc	0.0387	0.0200		mg/L	201985	1	01/22/2015 23:58	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-206-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:25	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Surr: 4-Bromofluorobenzene	94.6	70.6-123		%REC	201897	1	01/20/2015 15:25	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 15:25	GK
Surr: Toluene-d8	95.9	81.3-120		%REC	201897	1	01/20/2015 15:25	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	1.8	0.50		ug/L	201771	1	01/18/2015 23:22	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 23:22	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 23:22	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Surr: 4-Terphenyl-d14	101	55.4-136		%REC	201771	1	01/18/2015 23:22	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:53	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 21:05	JW
Sulfate	6.8	1.0		mg/L	R283938	1	01/15/2015 21:05	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-206-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	7	4		ug/L	201752	1	01/15/2015 19:38	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	9.41	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	319	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:02	JL
Barium	0.201	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:02	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-319-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:35:00 PM
Lab ID:	1501A32-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/19/2015 23:04	GK
Benzene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Toluene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	201897	1	01/19/2015 23:04	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/19/2015 23:04	GK
Surr: Toluene-d8	96.7	81.3-120		%REC	201897	1	01/19/2015 23:04	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202068	1	01/23/2015 15:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 14:58	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 14:58	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 14:58	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201771	1	01/18/2015 14:58	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:55	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 21:20	JW
Sulfate	22	1.0		mg/L	R283938	1	01/15/2015 21:20	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-319-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:35:00 PM
Lab ID:	1501A32-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 19:48	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.364	0.200		mg/L	R283868	2	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.50	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	174	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:06	JL
Barium	0.642	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:06	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-318-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:45:00 PM
Lab ID:	1501A32-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:36	NP
Benzene	1400	50		ug/L	201897	10	01/20/2015 12:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Xylenes, Total	13	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Surr: 4-Bromofluorobenzene	96.2	70.6-123		%REC	201897	10	01/20/2015 12:50	GK
Surr: 4-Bromofluorobenzene	99.6	70.6-123		%REC	201897	1	01/20/2015 16:36	NP
Surr: Dibromofluoromethane	96.2	78.7-124		%REC	201897	1	01/20/2015 16:36	NP
Surr: Dibromofluoromethane	97	78.7-124		%REC	201897	10	01/20/2015 12:50	GK
Surr: Toluene-d8	85.8	81.3-120		%REC	201897	1	01/20/2015 16:36	NP
Surr: Toluene-d8	95.3	81.3-120		%REC	201897	10	01/20/2015 12:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	920	50		ug/L	201771	100	01/19/2015 21:16	YH
Acenaphthylene	BRL	10		ug/L	201771	10	01/19/2015 19:56	YH
Acenaphthene	37	5.0		ug/L	201771	10	01/19/2015 19:56	YH
Fluorene	4.6	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Phenanthrene	4.5	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Anthracene	0.81	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Fluoranthene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Pyrene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Benz(a)anthracene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Chrysene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(b)fluoranthene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(k)fluoranthene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(a)pyrene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Indeno(1,2,3-cd)pyrene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Dibenz(a,h)anthracene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(g,h,i)perylene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Surr: 4-Terphenyl-d14	100	55.4-136		%REC	201771	10	01/19/2015 19:56	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:57	TA
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-318-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:45:00 PM
Lab ID:	1501A32-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 21:34	JW
Sulfate	BRL	1.0		mg/L	R283938	1	01/15/2015 21:34	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	2800	80		ug/L	201752	20	01/15/2015 20:06	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.995	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.29	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	172	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:10	JL
Barium	0.551	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:10	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-203-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 3:50:00 PM
Lab ID:	1501A32-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:55	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Surr: 4-Bromofluorobenzene	93.2	70.6-123		%REC	201897	1	01/20/2015 15:55	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201897	1	01/20/2015 15:55	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201897	1	01/20/2015 15:55	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 12:38	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 12:38	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 12:38	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(k)fluoranthene	0.068	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(a)pyrene	0.075	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Indeno(1,2,3-cd)pyrene	0.13	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Dibenz(a,h)anthracene	0.13	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(g,h,i)perylene	0.12	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Surr: 4-Terphenyl-d14	94.6	55.4-136		%REC	201811	1	01/21/2015 12:38	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:59	TA
ION SCAN SW9056A								
Nitrate	0.51	0.25		mg/L	R283938	1	01/15/2015 21:49	JW
Sulfate	13	1.0		mg/L	R283938	1	01/15/2015 21:49	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-203-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 3:50:00 PM
Lab ID:	1501A32-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 19:57	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	9.08	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	81.2	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:14	JL
Barium	0.0758	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:14	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Vanadium	0.0607	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Zinc	0.0312	0.0200		mg/L	201985	1	01/23/2015 00:14	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-512BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:20:00 PM
Lab ID:	1501A32-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:25	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Surr: 4-Bromofluorobenzene	95.9	70.6-123		%REC	201897	1	01/20/2015 16:25	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201897	1	01/20/2015 16:25	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201897	1	01/20/2015 16:25	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 13:04	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 13:04	YH
Acenaphthene	2.5	0.50		ug/L	201811	1	01/21/2015 13:04	YH
Fluorene	0.28	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Anthracene	0.051	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Indeno(1,2,3-cd)pyrene	0.081	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Surr: 4-Terphenyl-d14	96.8	55.4-136		%REC	201811	1	01/21/2015 13:04	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:01	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 22:04	JW
Sulfate	22	1.0		mg/L	R283938	1	01/15/2015 22:04	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-512BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:20:00 PM
Lab ID:	1501A32-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	4900	400		ug/L	201751	100	01/16/2015 11:52	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.00	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	269	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:17	JL
Barium	0.154	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:17	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-404DR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:30:00 PM
Lab ID:	1501A32-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:55	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Surr: 4-Bromofluorobenzene	94.9	70.6-123		%REC	201897	1	01/20/2015 16:55	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 16:55	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201897	1	01/20/2015 16:55	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	3.3	0.50		ug/L	201811	1	01/21/2015 14:04	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 14:04	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 14:04	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Surr: 4-Terphenyl-d14	103	55.4-136		%REC	201811	1	01/21/2015 14:04	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:03	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 22:19	JW
Sulfate	78	1.0		mg/L	R283938	1	01/15/2015 22:19	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-404DR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:30:00 PM
Lab ID:	1501A32-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 11:18	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.96	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	253	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:21	JL
Barium	0.0678	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:21	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-19-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:45:00 PM
Lab ID:	1501A32-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:25	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201897	1	01/20/2015 17:25	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	201897	1	01/20/2015 17:25	GK
Surr: Toluene-d8	95.9	81.3-120		%REC	201897	1	01/20/2015 17:25	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.020	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 14:30	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 14:30	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 14:30	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Anthracene	0.092	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201811	1	01/21/2015 14:30	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:04	TA
ION SCAN SW9056A								
Nitrate	0.70	0.25		mg/L	R283938	1	01/15/2015 23:17	JW
Sulfate	87	1.0		mg/L	R283938	1	01/15/2015 23:17	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-19-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:45:00 PM
Lab ID:	1501A32-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 11:23	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.50	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	236	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 22:47	JL
Barium	0.0824	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 22:47	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Nickel	0.0275	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Zinc	0.0747	0.0200		mg/L	201985	1	01/22/2015 22:47	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 5:25:00 PM
Lab ID:	1501A32-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:56	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Trichloroethene	9.7	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Surr: 4-Bromofluorobenzene	93.5	70.6-123		%REC	201897	1	01/20/2015 17:56	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 17:56	GK
Surr: Toluene-d8	96.9	81.3-120		%REC	201897	1	01/20/2015 17:56	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 14:57	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 14:57	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 14:57	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201811	1	01/21/2015 14:57	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:06	TA
ION SCAN SW9056A								
Nitrate	1.7	0.25		mg/L	R283938	1	01/15/2015 23:32	JW
Sulfate	34	1.0		mg/L	R283938	1	01/15/2015 23:32	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 5:25:00 PM
Lab ID:	1501A32-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 11:29	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.03	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	77.4	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:25	JL
Barium	0.0961	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:25	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Copper	0.0407	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Zinc	0.0358	0.0200		mg/L	201985	1	01/23/2015 00:25	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-03-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015
Lab ID:	1501A32-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:34	NP
Benzene	3600	250		ug/L	201897	50	01/20/2015 11:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:34	NP
Ethylbenzene	990	250		ug/L	201897	50	01/20/2015 11:20	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:34	NP
Toluene	740	250		ug/L	201897	50	01/20/2015 11:20	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 17:34	NP
Xylenes, Total	980	250		ug/L	201897	50	01/20/2015 11:20	GK
Surr: 4-Bromofluorobenzene	98.1	70.6-123		%REC	201897	50	01/20/2015 11:20	GK
Surr: 4-Bromofluorobenzene	104	70.6-123		%REC	201897	1	01/20/2015 17:34	NP
Surr: Dibromofluoromethane	98.4	78.7-124		%REC	201897	50	01/20/2015 11:20	GK
Surr: Dibromofluoromethane	95.2	78.7-124		%REC	201897	1	01/20/2015 17:34	NP
Surr: Toluene-d8	95.1	81.3-120		%REC	201897	50	01/20/2015 11:20	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201897	1	01/20/2015 17:34	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.012	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	4900	500		ug/L	201811	1000	01/22/2015 19:21	YH
Acenaphthylene	3.3	1.0		ug/L	201811	1	01/21/2015 15:23	YH
Acenaphthene	73	5.0		ug/L	201811	10	01/22/2015 10:53	YH
Fluorene	23	1.0		ug/L	201811	10	01/22/2015 10:53	YH
Phenanthrene	14	0.50		ug/L	201811	10	01/22/2015 10:53	YH
Anthracene	1.9	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Fluoranthene	0.35	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Pyrene	0.32	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201811	1	01/21/2015 15:23	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:08	TA
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-03-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015
Lab ID:	1501A32-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 23:47	JW
Sulfate	BRL	1.0		mg/L	R283938	1	01/15/2015 23:47	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	3700	80		ug/L	201751	20	01/16/2015 11:56	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	7.79	1.00	H	mg/L	R283868	10	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	5.98	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	259	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:28	JL
Barium	0.236	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:28	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015
Lab ID:	1501A32-021	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/19/2015 22:34	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Surr: 4-Bromofluorobenzene	94.5	70.6-123		%REC	201805	1	01/19/2015 22:34	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201805	1	01/19/2015 22:34	GK
Surr: Toluene-d8	96.8	81.3-120		%REC	201805	1	01/19/2015 22:34	GK

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501A32

Checklist completed by Jaime Pacuar 1/16/15
Signature Date

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

Shipping container/cooler in good condition?	Yes ✓	No __	Not Present __
Custody seals intact on shipping container/cooler?	Yes ✓	No __	Not Present __
Custody seals intact on sample bottles?	Yes __	No __	Not Present ✓
Container/Temp Blank temperature in compliance? (0°≤6°C)*	Yes ✓	No __	

Cooler #1 3.1°C Cooler #2 3.2°C Cooler #3 3.4°C Cooler #4 3.1°C Cooler#5 3.5°C Cooler #6 _____

Chain of custody present?	Yes ✓	No __
Chain of custody signed when relinquished and received?	Yes ✓	No __
Chain of custody agrees with sample labels?	Yes __	No ✓
Samples in proper container/bottle?	Yes ✓	No __
Sample containers intact?	Yes ✓	No __
Sufficient sample volume for indicated test?	Yes ✓	No __
All samples received within holding time?	Yes ✓	No __
Was TAT marked on the COC?	Yes ✓	No __
Proceed with Standard TAT as per project history?	Yes __	No __ Not Applicable ✓
Water - VOA vials have zero headspace?	No VOA vials submitted __	Yes ✓ No __
Water - pH acceptable upon receipt?	Yes ✓	No __ Not Applicable __

Adjusted? _____ Checked by Fayaz

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-001A	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-001B	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-001C	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-001C	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-001D	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-002A	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-002B	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-002C	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-002C	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-002D	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-003A	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-003B	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-003B	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/22/2015
1501A32-003C	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-003C	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-003D	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-004A	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-004B	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-004B	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-004B	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/20/2015
1501A32-004C	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-004C	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-004D	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-005A	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-005B	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-005B	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-005B	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/20/2015
1501A32-005C	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-005C	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-005D	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-006A	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-006B	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-006B	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/20/2015
1501A32-006C	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-006C	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-006D	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-007A	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-007B	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-007C	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-007C	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-007D	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-008A	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-008B	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-008B	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-008B	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/21/2015
1501A32-008C	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-008C	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-008D	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-009A	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-009B	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-009C	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-009C	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-009D	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-010A	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-010B	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-010C	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-010C	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-010C	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-010D	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-010D	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-010E	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-010G	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-011A	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-011B	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-011C	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-011D	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-011D	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-011E	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-011F	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-011G	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-011G	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	ION SCAN			01/16/2015
1501A32-011H	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-011H	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-011H	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-012A	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-012B	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-012C	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-012D	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-012D	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-012E	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-012F	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-012G	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-012H	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-012H	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-012H	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-013A	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/19/2015
1501A32-013B	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-013C	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-013D	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-013D	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-013E	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Total Cyanide		1/23/2015 11:00:00 AM	01/23/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-013G	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-014A	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-014B	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-014C	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-014D	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-014D	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-014E	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-014G	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-015A	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-015B	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-015C	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-015D	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-015D	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-015E	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-015F	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-015G	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-015H	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-015H	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-015H	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-016A	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-016B	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-016C	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-016D	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-016D	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-016E	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-016G	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-017A	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-017B	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-017C	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-017D	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-017D	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-017E	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-017F	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-017G	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-017H	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-017H	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-017H	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-018A	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-018B	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-018C	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-018D	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-018D	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-018E	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-018G	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-019A	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-019B	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-019C	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-019D	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-019D	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-019E	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-019G	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-020A	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-020B	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-020C	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-020C	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/22/2015
1501A32-020D	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-020D	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-020E	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Alkalinity			01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Ferrous Iron			01/15/2015
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-020G	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	ION SCAN			01/15/2015
1501A32-021A	TB-01	1/14/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:41:00 AM	01/19/2015
1501A32-023B	MW-319-20150115-01	1/15/2015 8:30:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-023G	MW-319-20150115-01	1/15/2015 8:30:00AM	Groundwater	ION SCAN			01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201751

Sample ID: **MB-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019659**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019660**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.0	4	200.0		55.0	45.1	115				

Sample ID: **LCSD-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019661**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	111.8	4	200.0		55.9	45.1	115	110.0	1.63	20	

Sample ID: **1501A32-017BMS**	Client ID: **MW-404DR-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019695**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	146.0	4	200.0		73.0	40.4	115				

Sample ID: **1501A32-017BMSD**	Client ID: **MW-404DR-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019696**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	126.2	4	200.0		63.1	40.4	115	146.0	14.5	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **MB-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013814**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013815**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	120.1	4	200.0		60.0	45.1	115				

Sample ID: **LCSD-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013816**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	117.3	4	200.0		58.7	45.1	115	120.1	2.33	20	

Sample ID: **1501604-005BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013819**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.8	4	200.0	4.107	53.3	40.4	115				

Sample ID: **1501A32-013BMS**	Client ID: **MW-319-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**	
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019638**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	119.1	4	200.0		59.6	40.4	115				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **1501604-005BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013820**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Methane	119.0	4	200.0	4.107	57.5	40.4	115	110.8	7.18	20

Sample ID: **1501A32-013BMSD**	Client ID: **MW-319-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**	
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019639**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Methane	122.2	4	200.0		61.1	40.4	115	119.1	2.55	20

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **MB-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017084**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	2.051	0	2.000		103	55.4	136				

Sample ID: **LCS-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.615	0.50	2.000		80.7	66.3	118				
Acenaphthylene	1.412	1.0	2.000		70.6	64	120				
Anthracene	1.567	0.050	2.000		78.3	64.6	127				
Benz(a)anthracene	1.684	0.050	2.000		84.2	60.6	137				
Benzo(a)pyrene	1.620	0.050	2.000		81.0	64	124				
Benzo(b)fluoranthene	1.994	0.10	2.000		99.7	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **LCS-201771**	Client ID:		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283858**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201771**	Analysis Date: **01/18/2015**	Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.879	0.10	2.000		93.9	49.9	137				
Benzo(k)fluoranthene	1.696	0.050	2.000		84.8	61.7	137				
Chrysene	1.755	0.050	2.000		87.7	65.5	127				
Dibenz(a,h)anthracene	1.928	0.10	2.000		96.4	52.4	130				
Fluoranthene	1.758	0.10	2.000		87.9	67	131				
Fluorene	1.609	0.10	2.000		80.5	68.3	120				
Indeno(1,2,3-cd)pyrene	1.863	0.050	2.000		93.1	50.4	139				
Naphthalene	1.550	0.50	2.000		77.5	61.1	120				
Phenanthrene	1.653	0.050	2.000		82.6	68	119				
Pyrene	1.681	0.050	2.000		84.0	62	127				
Surr: 4-Terphenyl-d14	1.781	0	2.000		89.0	55.4	136				

Sample ID: **1501A32-013CMS**	Client ID: **MW-319-20150114-01**		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283858**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201771**	Analysis Date: **01/18/2015**	Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.525	0.50	2.000		76.2	45.6	120				
Acenaphthylene	1.303	1.0	2.000		65.1	48.3	124				
Anthracene	1.448	0.050	2.000		72.4	57.7	124				
Benz(a)anthracene	1.462	0.050	2.000	0.01370	72.4	50.3	143				
Benzo(a)pyrene	1.499	0.050	2.000	0.01619	74.2	44.2	127				
Benzo(b)fluoranthene	1.875	0.10	2.000	0.02263	92.6	48.4	125				
Benzo(g,h,i)perylene	1.815	0.10	2.000	0.03551	89.0	40.2	122				
Benzo(k)fluoranthene	1.724	0.050	2.000	0.01689	85.4	45.5	122				
Chrysene	1.674	0.050	2.000	0.01554	82.9	46	124				
Dibenz(a,h)anthracene	1.734	0.10	2.000	0.02836	85.3	40.1	128				
Fluoranthene	1.620	0.10	2.000	0.01414	80.3	58	127				
Fluorene	1.497	0.10	2.000		74.8	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **1501A32-013CMS** Client ID: **MW-319-20150114-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.776	0.050	2.000	0.02686	87.5	40.3	129				
Naphthalene	1.598	0.50	2.000	0.1289	73.5	46.6	120				
Phenanthrene	1.550	0.050	2.000	0.01511	76.8	50.6	122				
Pyrene	1.613	0.050	2.000		80.6	50.1	128				
Surr: 4-Terphenyl-d14	1.597	0	2.000		79.9	55.4	136				

Sample ID: **1501A32-013CMSD** Client ID: **MW-319-20150114-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017101**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.451	0.50	2.000		72.5	45.6	120	1.525	4.98	29.4	
Acenaphthylene	1.230	1.0	2.000		61.5	48.3	124	1.303	5.79	32.5	
Anthracene	1.412	0.050	2.000		70.6	57.7	124	1.448	2.56	21.9	
Benz(a)anthracene	1.493	0.050	2.000	0.01370	73.9	50.3	143	1.462	2.06	26.8	
Benzo(a)pyrene	1.445	0.050	2.000	0.01619	71.5	44.2	127	1.499	3.66	40.9	
Benzo(b)fluoranthene	1.808	0.10	2.000	0.02263	89.3	48.4	125	1.875	3.61	24.2	
Benzo(g,h,i)perylene	1.640	0.10	2.000	0.03551	80.2	40.2	122	1.815	10.2	26.2	
Benzo(k)fluoranthene	1.638	0.050	2.000	0.01689	81.1	45.5	122	1.724	5.11	23.3	
Chrysene	1.675	0.050	2.000	0.01554	83.0	46	124	1.674	0.033	25	
Dibenz(a,h)anthracene	1.636	0.10	2.000	0.02836	80.4	40.1	128	1.734	5.85	23.6	
Fluoranthene	1.604	0.10	2.000	0.01414	79.5	58	127	1.620	1.01	23.5	
Fluorene	1.439	0.10	2.000		71.9	52.6	124	1.497	3.94	31.5	
Indeno(1,2,3-cd)pyrene	1.645	0.050	2.000	0.02686	80.9	40.3	129	1.776	7.67	28.8	
Naphthalene	1.474	0.50	2.000	0.1289	67.2	46.6	120	1.598	8.11	22.9	
Phenanthrene	1.524	0.050	2.000	0.01511	75.4	50.6	122	1.550	1.74	20.2	
Pyrene	1.553	0.050	2.000		77.6	50.1	128	1.613	3.79	24.7	
Surr: 4-Terphenyl-d14	1.616	0	2.000		80.8	55.4	136	1.597	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **MB-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014981**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	42.70	0	50.00		85.4	70.6	123				
Surr: Dibromofluoromethane	54.98	0	50.00		110	78.7	124				
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120				

Sample ID: **LCS-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.66	5.0	50.00		93.3	72.8	128				
Toluene	46.50	5.0	50.00		93.0	74.9	127				
Trichloroethene	49.63	5.0	50.00		99.3	70.5	134				
Surr: 4-Bromofluorobenzene	40.51	0	50.00		81.0	70.6	123				
Surr: Dibromofluoromethane	50.05	0	50.00		100	78.7	124				
Surr: Toluene-d8	46.15	0	50.00		92.3	81.3	120				

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.43	5.0	50.00		105	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	51.66	5.0	50.00		103	70.5	137				
Trichloroethene	52.57	5.0	50.00		105	71.8	139				
Surr: 4-Bromofluorobenzene	37.51	0	50.00		75.0	70.6	123				
Surr: Dibromofluoromethane	48.86	0	50.00		97.7	78.7	124				
Surr: Toluene-d8	47.61	0	50.00		95.2	81.3	120				

Sample ID: **1501934-001AMSD** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016674**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	53.44	5.0	50.00		107	70	135	52.43	1.91	20	
Toluene	52.74	5.0	50.00		105	70.5	137	51.66	2.07	20	
Trichloroethene	53.90	5.0	50.00		108	71.8	139	52.57	2.50	20	
Surr: 4-Bromofluorobenzene	37.47	0	50.00		74.9	70.6	123	37.51	0	0	
Surr: Dibromofluoromethane	49.24	0	50.00		98.5	78.7	124	48.86	0	0	
Surr: Toluene-d8	45.13	0	50.00		90.3	81.3	120	47.61	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **MB-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023767**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.937	0	2.000		96.8	55.4	136				

Sample ID: **LCS-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	2.125	0.50	2.000		106	66.3	118				
Acenaphthylene	1.929	1.0	2.000		96.5	64	120				
Anthracene	2.040	0.050	2.000		102	64.6	127				
Benz(a)anthracene	2.139	0.050	2.000		107	60.6	137				
Benzo(a)pyrene	1.942	0.050	2.000	0.01083	96.5	64	124				
Benzo(b)fluoranthene	2.185	0.10	2.000	0.01266	109	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **LCS-201811**	Client ID:		Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **284122**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201811**	Analysis Date: **01/21/2015**	Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.938	0.10	2.000	0.02005	95.9	49.9	137				
Benzo(k)fluoranthene	1.948	0.050	2.000	0.009700	96.9	61.7	137				
Chrysene	2.081	0.050	2.000		104	65.5	127				
Dibenz(a,h)anthracene	2.071	0.10	2.000	0.02390	102	52.4	130				
Fluoranthene	2.147	0.10	2.000		107	67	131				
Fluorene	2.000	0.10	2.000		100	68.3	120				
Indeno(1,2,3-cd)pyrene	2.134	0.050	2.000	0.02249	106	50.4	139				
Naphthalene	1.984	0.50	2.000		99.2	61.1	120				
Phenanthrene	1.886	0.050	2.000	0.01169	93.7	68	119				
Pyrene	1.955	0.050	2.000		97.7	62	127				
Surr: 4-Terphenyl-d14	1.988	0	2.000		99.4	55.4	136				

Sample ID: **1501A32-015CMS**	Client ID: **MW-203-20150114-01**		Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **284122**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201811**	Analysis Date: **01/21/2015**	Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.761	0.50	2.000		88.1	45.6	120				
Acenaphthylene	1.710	1.0	2.000		85.5	48.3	124				
Anthracene	1.799	0.050	2.000		89.9	57.7	124				
Benz(a)anthracene	1.997	0.050	2.000		99.8	50.3	143				
Benzo(a)pyrene	1.772	0.050	2.000		88.6	44.2	127				
Benzo(b)fluoranthene	2.008	0.10	2.000		100	48.4	125				
Benzo(g,h,i)perylene	1.902	0.10	2.000		95.1	40.2	122				
Benzo(k)fluoranthene	1.787	0.050	2.000		89.4	45.5	122				
Chrysene	1.916	0.050	2.000		95.8	46	124				
Dibenz(a,h)anthracene	2.090	0.10	2.000		105	40.1	128				
Fluoranthene	1.987	0.10	2.000		99.4	58	127				
Fluorene	1.797	0.10	2.000		89.9	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **1501A32-015CMS** Client ID: **MW-203-20150114-01** Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.971	0.050	2.000		98.5	40.3	129				
Naphthalene	1.742	0.50	2.000		87.1	46.6	120				
Phenanthrene	1.696	0.050	2.000		84.8	50.6	122				
Pyrene	1.727	0.050	2.000		86.3	50.1	128				
Surr: 4-Terphenyl-d14	1.824	0	2.000		91.2	55.4	136				

Sample ID: **1501A32-015CMSD** Client ID: **MW-203-20150114-01** Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023770**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.901	0.50	2.000		95.1	45.6	120	1.761	7.66	29.4	
Acenaphthylene	1.817	1.0	2.000		90.9	48.3	124	1.710	6.09	32.5	
Anthracene	1.990	0.050	2.000		99.5	57.7	124	1.799	10.1	21.9	
Benz(a)anthracene	2.062	0.050	2.000		103	50.3	143	1.997	3.21	26.8	
Benzo(a)pyrene	1.848	0.050	2.000		92.4	44.2	127	1.772	4.19	40.9	
Benzo(b)fluoranthene	2.135	0.10	2.000		107	48.4	125	2.008	6.14	24.2	
Benzo(g,h,i)perylene	1.969	0.10	2.000		98.5	40.2	122	1.902	3.48	26.2	
Benzo(k)fluoranthene	1.899	0.050	2.000		94.9	45.5	122	1.787	6.04	23.3	
Chrysene	2.040	0.050	2.000		102	46	124	1.916	6.28	25	
Dibenz(a,h)anthracene	2.044	0.10	2.000		102	40.1	128	2.090	2.26	23.6	
Fluoranthene	2.088	0.10	2.000		104	58	127	1.987	4.94	23.5	
Fluorene	1.938	0.10	2.000		96.9	52.6	124	1.797	7.54	31.5	
Indeno(1,2,3-cd)pyrene	2.044	0.050	2.000		102	40.3	129	1.971	3.64	28.8	
Naphthalene	1.823	0.50	2.000		91.1	46.6	120	1.742	4.52	22.9	
Phenanthrene	1.834	0.050	2.000		91.7	50.6	122	1.696	7.80	20.2	
Pyrene	1.901	0.050	2.000		95.1	50.1	128	1.727	9.63	24.7	
Surr: 4-Terphenyl-d14	2.116	0	2.000		106	55.4	136	1.824	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201831

Sample ID: **MB-201831**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6015967**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201831**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6015968**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2473	0.010	0.2500		98.9	90	110				

Sample ID: **1501895-010EMS**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6016007**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2686	0.010	0.2500		107	90	110				

Sample ID: **1501895-020EMS**	Client ID:				Units: **mg/L**		Prep Date: **01/16/2015**		Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6016010**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2605	0.010	0.2500	0.007500	101	90	110				

Sample ID: **1501895-010EMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6016009**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2680	0.010	0.2500		107	90	110	0.2686	0.224	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201897

Sample ID: **MB-201897** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **283920**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201897** Analysis Date: **01/19/2015** Seq No: **6018458**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	46.86	0	50.00		93.7	70.6	123				
Surr: Dibromofluoromethane	49.02	0	50.00		98.0	78.7	124				
Surr: Toluene-d8	48.00	0	50.00		96.0	81.3	120				

Sample ID: **LCS-201897** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **283920**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201897** Analysis Date: **01/19/2015** Seq No: **6018457**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	45.35	5.0	50.00		90.7	72.8	128				
Toluene	45.71	5.0	50.00		91.4	74.9	127				
Trichloroethene	47.43	5.0	50.00		94.9	70.5	134				
Surr: 4-Bromofluorobenzene	47.37	0	50.00		94.7	70.6	123				
Surr: Dibromofluoromethane	48.75	0	50.00		97.5	78.7	124				
Surr: Toluene-d8	48.44	0	50.00		96.9	81.3	120				

Sample ID: **1501A32-013AMS** Client ID: **MW-319-20150114-01** Units: **ug/L** Prep Date: **01/19/2015** Run No: **283921**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201897** Analysis Date: **01/20/2015** Seq No: **6019648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.11	5.0	50.00		94.2	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201897

Sample ID: **1501A32-013AMS**	Client ID: **MW-319-20150114-01**	Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **283921**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201897**	Analysis Date: **01/20/2015**	Seq No: **6019648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	48.11	5.0	50.00		96.2	70.5	137				
Trichloroethene	49.32	5.0	50.00		98.6	71.8	139				
Surr: 4-Bromofluorobenzene	47.46	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	49.48	0	50.00		99.0	78.7	124				
Surr: Toluene-d8	47.96	0	50.00		95.9	81.3	120				

Sample ID: **1501A32-013AMSD**	Client ID: **MW-319-20150114-01**	Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **283921**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201897**	Analysis Date: **01/20/2015**	Seq No: **6019649**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	45.92	5.0	50.00		91.8	70	135	47.11	2.56	20	
Toluene	46.84	5.0	50.00		93.7	70.5	137	48.11	2.68	20	
Trichloroethene	48.20	5.0	50.00		96.4	71.8	139	49.32	2.30	20	
Surr: 4-Bromofluorobenzene	47.53	0	50.00		95.1	70.6	123	47.46	0	0	
Surr: Dibromofluoromethane	49.10	0	50.00		98.2	78.7	124	49.48	0	0	
Surr: Toluene-d8	47.71	0	50.00		95.4	81.3	120	47.96	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201942

Sample ID: **MB-201942**	Client ID:			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201942**	Client ID:			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020783**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2659	0.010	0.2500		106	90	110				

Sample ID: **1501A32-010EMS**	Client ID: **MW-12-20150114-01**			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2653	0.010	0.2500	0.008100	103	90	110				

Sample ID: **1501A32-020EMS**	Client ID: **DUP-03-20150114-01**			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020805**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1988	0.010	0.2500	0.01230	74.6	90	110				S

Sample ID: **1501A32-010EMSD**	Client ID: **MW-12-20150114-01**			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020804**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2645	0.010	0.2500	0.008100	103	90	110	0.2653	0.302	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201962

Sample ID: **MB-201962**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023127**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201962**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023128**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004910	0.00020	0.0050	0.00004380	97.3	80	120				

Sample ID: **1501A32-001CMS**	Client ID: **MW-306SAP-20150114-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023130**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005203	0.00020	0.0050		104	70	130				

Sample ID: **1501A32-001CMSD**	Client ID: **MW-306SAP-20150114-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023131**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005216	0.00020	0.0050		104	70	130	0.005203	0.234	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201985

Sample ID: **MB-201985** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026183**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201985** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026184**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.038	0.0200	1.000		104	80	120				
Arsenic	1.016	0.0500	1.000		102	80	120				
Barium	1.025	0.0200	1.000	0.002356	102	80	120				
Beryllium	1.025	0.0100	1.000		103	80	120				
Cadmium	1.022	0.0050	1.000		102	80	120				
Chromium	1.009	0.0100	1.000		101	80	120				
Copper	0.9900	0.0100	1.000		99.0	80	120				
Lead	1.021	0.0100	1.000		102	80	120				
Nickel	1.020	0.0200	1.000		102	80	120				
Selenium	1.013	0.0200	1.000		101	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201985

Sample ID: **LCS-201985** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026184**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	1.005	0.0200	1.000		100	80	120				
Vanadium	1.018	0.0100	1.000		102	80	120				
Zinc	1.023	0.0200	1.000		102	80	120				

Sample ID: **1501A32-018DMS** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026186**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.029	0.0200	1.000		103	75	125				
Arsenic	1.024	0.0500	1.000		102	75	125				
Barium	1.073	0.0200	1.000	0.08241	99.1	75	125				
Beryllium	1.003	0.0100	1.000		100	75	125				
Cadmium	1.010	0.0050	1.000	0.0009736	101	75	125				
Chromium	0.9874	0.0100	1.000	0.003774	98.4	75	125				
Copper	0.9681	0.0100	1.000		96.8	75	125				
Lead	0.9820	0.0100	1.000		98.2	75	125				
Nickel	1.007	0.0200	1.000	0.02747	98.0	75	125				
Selenium	1.015	0.0200	1.000	0.01408	100	75	125				
Thallium	0.9844	0.0200	1.000		98.4	75	125				
Vanadium	0.9978	0.0100	1.000	0.0009134	99.7	75	125				
Zinc	1.068	0.0200	1.000	0.07467	99.3	75	125				

Sample ID: **1501A32-018DMSD** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026187**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.029	0.0200	1.000		103	75	125	1.029	0.005	20	
Arsenic	1.011	0.0500	1.000		101	75	125	1.024	1.29	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201985

Sample ID: **1501A32-018DMSD** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026187**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	1.063	0.0200	1.000	0.08241	98.0	75	125	1.073	1.01	20	
Beryllium	0.9879	0.0100	1.000		98.8	75	125	1.003	1.49	20	
Cadmium	1.003	0.0050	1.000	0.0009736	100	75	125	1.010	0.667	20	
Chromium	0.9751	0.0100	1.000	0.003774	97.1	75	125	0.9874	1.25	20	
Copper	0.9512	0.0100	1.000		95.1	75	125	0.9681	1.77	20	
Lead	0.9685	0.0100	1.000		96.9	75	125	0.9820	1.39	20	
Nickel	0.9952	0.0200	1.000	0.02747	96.8	75	125	1.007	1.21	20	
Selenium	1.012	0.0200	1.000	0.01408	99.8	75	125	1.015	0.326	20	
Thallium	0.9721	0.0200	1.000		97.2	75	125	0.9844	1.26	20	
Vanadium	0.9820	0.0100	1.000	0.0009134	98.1	75	125	0.9978	1.60	20	
Zinc	1.050	0.0200	1.000	0.07467	97.5	75	125	1.068	1.67	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 202068

Sample ID: **MB-202068**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025520**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202068**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025521**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2467	0.010	0.2500		98.7	90	110				

Sample ID: **1501B94-002CMS**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025529**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2311	0.010	0.2500		92.4	90	110				

Sample ID: **1501C78-005CMS**	Client ID:				Units: **mg/L**		Prep Date: **01/23/2015**		Run No: **284214**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/23/2015**		Seq No: **6027362**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1643	0.010	0.2500	0.005400	63.6	90	110				S

Sample ID: **1501B94-002CMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025530**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2305	0.010	0.2500		92.2	90	110	0.2311	0.260	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283868

Sample ID: **MB-R283868** Client ID: Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MBLK** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017295**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283868** Client ID: Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **LCS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017296**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4832	0.100	0.5000		96.6	85	115				

Sample ID: **1501A32-013FMS** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017310**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	1.300	0.200	1.000	0.3644	93.6	80	120				

Sample ID: **1501A32-018FMS** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017308**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4667	0.100	0.5000		93.3	80	120				

Sample ID: **1501A32-013FMSD** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MSD** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017311**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	1.251	0.200	1.000	0.3644	88.6	80	120	1.300	3.86	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283868

Sample ID: **1501A32-018FMSD** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MSD** TestCode: **Ferrous Iron SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017309**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4996	0.100	0.5000		99.9	80	120	0.4667	6.81	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283938

Sample ID: **MB-R283938** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019067**

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

Sample ID: **LCS-R283938** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.138	0.25	5.000		103	90	110				
Sulfate	26.53	1.0	25.00		106	90	110				

Sample ID: **1501A32-013GMS** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/16/2015** Seq No: **6019140**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	3.921	0.25	5.000		78.4	90	110				S
Sulfate	44.06	1.0	25.00	22.32	87.0	90	110				S

Sample ID: **1501A43-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019070**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	57.71	2.5	50.00	9.168	97.1	90	110				
Sulfate	304.1	10	250.0	55.76	99.3	90	110				

Sample ID: **1501A44-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	57.10	2.5	50.00	6.165	102	90	110				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283938

Sample ID: **1501A44-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	294.9	10	250.0	39.21	102	90	110				

Sample ID: **1501A32-013GMSD** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/16/2015** Seq No: **6019141**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	3.953	0.25	5.000		79.1	90	110	3.921	0.825	20	S
Sulfate	44.13	1.0	25.00	22.32	87.2	90	110	44.06	0.147	20	S

Sample ID: **1501A43-002BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019071**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	58.18	2.5	50.00	9.168	98.0	90	110	57.71	0.813	20	
Sulfate	297.5	10	250.0	55.76	96.7	90	110	304.1	2.20	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R284171

Sample ID: **MB-R284171**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284171**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284171**	Analysis Date: **01/21/2015**	Seq No: **6024649**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501A32-010FDUP**	Client ID: **MW-12-20150114-01**		Units: **mg/L**	Prep Date:	Run No: **284171**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284171**	Analysis Date: **01/21/2015**	Seq No: **6024667**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	3.030	1.00						3.020	0.331	20	H

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R284335

Sample ID: **MB-R284335**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028150**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501B40-001GDUP**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	7.710	1.00						7.730	0.259	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 26, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501A82

Analytical Environmental Services, Inc. received 10 samples on 1/15/2015 4:30:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501A82

Date: 01-15-2015 Page 1 of 1

COMPANY:	ADDRESS:
ENVIRONMENTAL RESOURCES MANAGEMENT	5200 WINDY HILL ROSE 1600 W ATLANTA, GA 30339
PHONE: (678) 486-2700	FAX:
SAMPLED BY: C. BROOKS, R. MAYETTE, A. NEAL, A. SOLOMOSTS, W. VARLO	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC 8260B	SVOC 8270C	METALS: HG	CYANIDE (total)	GASES DSK-175	FERROUS FE SM3500	SULFATE/NITRATES 9056	CO2 + O2	PRESERVATION (See codes) H	NaOH	N	NaOH	NA	NA	NA	NA	REMARKS	No # of Containers
1	MW-509BR-20150115-01	01/15/2015	08:55	X		Air	Z	Z	1	1	Z	1	1	1										4
2	MW-509D-20150115-01	"	10:00																					11
3	MW-507BR-20150115-01	"	10:35																					10
4	MW-505-20150115-01	"	11:00																					11
5	MW-402S-20150115-01	"	11:05																					60
6	MW-402BR-20150115-01	"	11:25																				Only MNA.	12
7	MW-505BR-20150115-01	"	12:10																					10
8	MW-304-20150115-01	"	12:15																					11
9	MW-402S-20150115-01 DD	"	12:20																					6
10	TB-01	NA	NA																					2
11																								
12																								
13																								
14																								

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Charles Brooks	1-15-15 14:50	1:	01-15-2015 7:52 PM
2: 01-15-2015 4:30PM		2: Loana Pacurar	1/15/15 1630
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Hall Kilpatrick

PROJECT #: 0230712.52

SITE ADDRESS: 812 8th St Augusta, GA 30901

SEND REPORT TO: greg.jirak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 82

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

STATE PROGRAM (if any):

E-mail? (Y) N: Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL (COURIER)

GREYHOUND OTHER

SAMPLES RECEIVED AFTER 5PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 27-Jan-15

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501A82

Case Narrative

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. F fraction samples were analyzed in the laboratory which is a deviation from the method.

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-509BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 8:55:00 AM
Lab ID:	1501A82-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/19/2015 09:06	GK
Benzene	2500	250		ug/L	201847	50	01/17/2015 14:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Ethylbenzene	260	250		ug/L	201847	50	01/17/2015 14:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Toluene	460	250		ug/L	201847	50	01/17/2015 14:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Xylenes, Total	160	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	201847	50	01/17/2015 14:14	GK
Surr: 4-Bromofluorobenzene	99.7	70.6-123		%REC	201847	1	01/19/2015 09:06	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201847	50	01/17/2015 14:14	GK
Surr: Dibromofluoromethane	98.7	78.7-124		%REC	201847	1	01/19/2015 09:06	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201847	50	01/17/2015 14:14	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201847	1	01/19/2015 09:06	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	810	50		ug/L	201811	100	01/22/2015 13:07	YH
Acenaphthylene	8.0	1.0		ug/L	201811	1	01/21/2015 17:37	YH
Acenaphthene	16	5.0		ug/L	201811	10	01/22/2015 11:47	YH
Fluorene	6.5	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Phenanthrene	7.9	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Anthracene	0.91	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Fluoranthene	0.45	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Pyrene	0.52	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Surr: 4-Terphenyl-d14	96.5	55.4-136		%REC	201811	1	01/21/2015 17:37	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:28	TA
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-509BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 8:55:00 AM
Lab ID:	1501A82-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 11:29	JW
Sulfate	4.6	1.0		mg/L	R283956	1	01/16/2015 11:29	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	980	40		ug/L	201751	10	01/16/2015 12:49	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.68	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	47.1	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:04	JL
Barium	0.128	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:04	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Zinc	0.109	0.0200		mg/L	201979	1	01/21/2015 22:04	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-505D-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:00:00 AM
Lab ID:	1501A82-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 14:44	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Ethylbenzene	13	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Xylenes, Total	6.8	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Surr: 4-Bromofluorobenzene	98.3	70.6-123		%REC	201847	1	01/17/2015 14:44	GK
Surr: Dibromofluoromethane	99.3	78.7-124		%REC	201847	1	01/17/2015 14:44	GK
Surr: Toluene-d8	96.6	81.3-120		%REC	201847	1	01/17/2015 14:44	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	4.2	0.50		ug/L	201926	1	01/21/2015 16:30	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 16:30	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 16:30	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(a)pyrene	0.051	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Indeno(1,2,3-cd)pyrene	0.10	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Dibenz(a,h)anthracene	0.11	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(g,h,i)perylene	0.11	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Surr: 4-Terphenyl-d14	90.8	55.4-136		%REC	201926	1	01/21/2015 16:30	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:30	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 11:44	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 11:44	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-505D-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:00:00 AM
Lab ID:	1501A82-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	9800	400		ug/L	201751	100	01/16/2015 12:58	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	23.4	2.50		mg/L	R283869	25	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.58	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	499	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:08	JL
Barium	0.342	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:08	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Zinc	0.0202	0.0200		mg/L	201979	1	01/21/2015 22:08	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-507BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:35:00 AM
Lab ID:	1501A82-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 15:14	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Surr: 4-Bromofluorobenzene	95	70.6-123		%REC	201847	1	01/17/2015 15:14	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201847	1	01/17/2015 15:14	GK
Surr: Toluene-d8	97.9	81.3-120		%REC	201847	1	01/17/2015 15:14	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201926	1	01/21/2015 16:55	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 16:55	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 16:55	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Indeno(1,2,3-cd)pyrene	0.072	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Surr: 4-Terphenyl-d14	93.1	55.4-136		%REC	201926	1	01/21/2015 16:55	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:32	TA
ION SCAN SW9056A								
Nitrate	0.61	0.25		mg/L	R283956	1	01/16/2015 12:37	JW
Sulfate	38	1.0		mg/L	R283956	1	01/16/2015 12:37	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-507BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:35:00 AM
Lab ID:	1501A82-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 12:14	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.16	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	56.6	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:12	JL
Barium	0.0698	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:12	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-501S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:00:00 AM
Lab ID:	1501A82-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 15:44	GK
Benzene	35	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Ethylbenzene	5.3	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Toluene	7.4	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Surr: 4-Bromofluorobenzene	97.7	70.6-123		%REC	201847	1	01/17/2015 15:44	GK
Surr: Dibromofluoromethane	98.4	78.7-124		%REC	201847	1	01/17/2015 15:44	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201847	1	01/17/2015 15:44	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.0	0.50		ug/L	201811	1	01/21/2015 18:03	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 18:03	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 18:03	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Surr: 4-Terphenyl-d14	87.8	55.4-136		%REC	201811	1	01/21/2015 18:03	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:38	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 13:36	JW
Sulfate	61	1.0		mg/L	R283956	1	01/16/2015 13:36	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-501S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:00:00 AM
Lab ID:	1501A82-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 12:23	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.62	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	323	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:22	JL
Barium	0.103	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Cadmium	0.0153	0.0050		mg/L	201979	1	01/21/2015 22:22	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:08:00 AM
Lab ID:	1501A82-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 16:14	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201847	1	01/17/2015 16:14	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201847	1	01/17/2015 16:14	GK
Surr: Toluene-d8	97.1	81.3-120		%REC	201847	1	01/17/2015 16:14	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 18:30	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 18:30	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 18:30	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Pyrene	0.064	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Surr: 4-Terphenyl-d14	99.4	55.4-136		%REC	201811	1	01/21/2015 18:30	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:40	TA
ION SCAN SW9056A								
Nitrate	2.5	0.25		mg/L	R283956	1	01/16/2015 13:51	JW
Sulfate	62	1.0		mg/L	R283956	1	01/16/2015 13:51	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:08:00 AM
Lab ID:	1501A82-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 12:28	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.46	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	168	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:26	JL
Barium	0.112	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:26	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408DR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:25:00 AM
Lab ID:	1501A82-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 14:05	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 14:05	JW
GC Analysis of Gaseous Samples SOP-RSK 175 (RSK175)								
Methane	6600	400		ug/L	201751	100	01/16/2015 13:04	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	3.85	1.00		mg/L	R283869	10	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.78	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	137	10.0		mg/L	R283971	1	01/20/2015 00:00	TL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-508BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:10:00 PM
Lab ID:	1501A82-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 16:44	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Surr: 4-Bromofluorobenzene	94.8	70.6-123		%REC	201847	1	01/17/2015 16:44	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201847	1	01/17/2015 16:44	GK
Surr: Toluene-d8	97.1	81.3-120		%REC	201847	1	01/17/2015 16:44	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201926	1	01/21/2015 17:21	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 17:21	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 17:21	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Indeno(1,2,3-cd)pyrene	0.067	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Surr: 4-Terphenyl-d14	93.9	55.4-136		%REC	201926	1	01/21/2015 17:21	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:42	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 14:20	JW
Sulfate	4.5	1.0		mg/L	R283956	1	01/16/2015 14:20	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-508BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:10:00 PM
Lab ID:	1501A82-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	500	40		ug/L	201751	10	01/16/2015 13:10	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.17	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	BRL	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:30	JL
Barium	0.614	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:30	JL
Chromium	0.0137	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-304-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:15:00 PM
Lab ID:	1501A82-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 17:14	GK
Benzene	27	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Xylenes, Total	9.6	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Surr: 4-Bromofluorobenzene	97.8	70.6-123		%REC	201847	1	01/17/2015 17:14	GK
Surr: Dibromofluoromethane	99.7	78.7-124		%REC	201847	1	01/17/2015 17:14	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201847	1	01/17/2015 17:14	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/21/2015 14:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	27	5.0		ug/L	201926	10	01/22/2015 13:33	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 17:47	YH
Acenaphthene	31	5.0		ug/L	201926	10	01/22/2015 13:33	YH
Fluorene	4.4	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Phenanthrene	3.2	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Anthracene	0.54	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Fluoranthene	0.40	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Pyrene	0.42	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Indeno(1,2,3-cd)pyrene	0.064	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Surr: 4-Terphenyl-d14	92.4	55.4-136		%REC	201926	1	01/21/2015 17:47	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:43	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 14:35	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 14:35	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-304-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:15:00 PM
Lab ID:	1501A82-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	6700	400		ug/L	201751	100	01/16/2015 13:54	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	32.7	2.50		mg/L	R283869	25	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.48	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	305	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:33	JL
Barium	0.324	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:33	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408S-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:20:00 PM
Lab ID:	1501A82-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 17:43	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Surr: 4-Bromofluorobenzene	95.5	70.6-123		%REC	201847	1	01/17/2015 17:43	GK
Surr: Dibromofluoromethane	99	78.7-124		%REC	201847	1	01/17/2015 17:43	GK
Surr: Toluene-d8	95.8	81.3-120		%REC	201847	1	01/17/2015 17:43	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/21/2015 14:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201926	1	01/21/2015 18:12	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 18:12	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 18:12	YH
Fluorene	0.40	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Fluoranthene	0.26	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Pyrene	0.096	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Surr: 4-Terphenyl-d14	92.7	55.4-136		%REC	201926	1	01/21/2015 18:12	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:45	TA
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Arsenic	0.222	0.0500		mg/L	201979	1	01/21/2015 22:37	JL
Barium	0.444	0.0200		mg/L	201979	1	01/21/2015 22:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408S-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:20:00 PM
Lab ID:	1501A82-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:37	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501A82-010	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201847	1	01/16/2015 22:45	GK
Benzene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Toluene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201847	1	01/16/2015 22:45	GK
Surr: Dibromofluoromethane	98.1	78.7-124		%REC	201847	1	01/16/2015 22:45	GK
Surr: Toluene-d8	96.8	81.3-120		%REC	201847	1	01/16/2015 22:45	GK

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501A82

Checklist completed by Joana Pacurar 1/15/15
Signature Date

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

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

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

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

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

Cooler #1 3.1°C Cooler #2 3.2°C Cooler #3 3.5°C Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by Dawn

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-001A	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-001A	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/19/2015
1501A82-001B	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-001C	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A82-001C	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/22/2015
1501A82-001D	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-001D	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-001E	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-001F	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-001G	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-001H	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-001H	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-001H	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-002A	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-002B	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-002C	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-002D	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-002D	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-002E	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-002F	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-002G	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-002H	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-002H	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-002H	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-003A	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-003B	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-003C	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-003D	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-003D	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-003E	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-003G	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-004A	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-004B	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-004C	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A82-004D	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-004D	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-004E	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-004F	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-004G	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-004H	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-004H	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-004H	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-005A	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-005B	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-005C	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A82-005D	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-005D	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-005E	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-005G	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-006A	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-006C	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-007A	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-007B	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-007C	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-007D	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-007D	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-007E	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Alkalinity			01/20/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Ferrous Iron			01/16/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-007G	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	ION SCAN			01/16/2015
1501A82-008A	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-008B	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-008C	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-008C	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/22/2015
1501A82-008D	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-008D	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-008E	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Total Cyanide		1/21/2015 10:45:00 AM	01/21/2015
1501A82-008F	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Ferrous Iron			01/16/2015
1501A82-008G	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	ION SCAN			01/16/2015
1501A82-008H	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Alkalinity			01/20/2015
1501A82-008H	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-008H	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-009A	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-009B	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-009C	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-009C	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-009D	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	Total Cyanide		1/21/2015 10:45:00 AM	01/21/2015
1501A82-010A	TB-01	1/15/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201751

Sample ID: **MB-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019659**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019660**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.0	4	200.0		55.0	45.1	115				

Sample ID: **LCSD-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019661**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	111.8	4	200.0		55.9	45.1	115	110.0	1.63	20	

Sample ID: **1501A32-017BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019695**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	146.0	4	200.0		73.0	40.4	115				

Sample ID: **1501A32-017BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019696**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	126.2	4	200.0		63.1	40.4	115	146.0	14.5	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **MB-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023767**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.937	0	2.000		96.8	55.4	136				

Sample ID: **LCS-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	2.125	0.50	2.000		106	66.3	118				
Acenaphthylene	1.929	1.0	2.000		96.5	64	120				
Anthracene	2.040	0.050	2.000		102	64.6	127				
Benz(a)anthracene	2.139	0.050	2.000		107	60.6	137				
Benzo(a)pyrene	1.942	0.050	2.000	0.01083	96.5	64	124				
Benzo(b)fluoranthene	2.185	0.10	2.000	0.01266	109	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **LCS-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.938	0.10	2.000	0.02005	95.9	49.9	137				
Benzo(k)fluoranthene	1.948	0.050	2.000	0.009700	96.9	61.7	137				
Chrysene	2.081	0.050	2.000		104	65.5	127				
Dibenz(a,h)anthracene	2.071	0.10	2.000	0.02390	102	52.4	130				
Fluoranthene	2.147	0.10	2.000		107	67	131				
Fluorene	2.000	0.10	2.000		100	68.3	120				
Indeno(1,2,3-cd)pyrene	2.134	0.050	2.000	0.02249	106	50.4	139				
Naphthalene	1.984	0.50	2.000		99.2	61.1	120				
Phenanthrene	1.886	0.050	2.000	0.01169	93.7	68	119				
Pyrene	1.955	0.050	2.000		97.7	62	127				
Surr: 4-Terphenyl-d14	1.988	0	2.000		99.4	55.4	136				

Sample ID: **1501A32-015CMS** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.761	0.50	2.000		88.1	45.6	120				
Acenaphthylene	1.710	1.0	2.000		85.5	48.3	124				
Anthracene	1.799	0.050	2.000		89.9	57.7	124				
Benz(a)anthracene	1.997	0.050	2.000		99.8	50.3	143				
Benzo(a)pyrene	1.772	0.050	2.000		88.6	44.2	127				
Benzo(b)fluoranthene	2.008	0.10	2.000		100	48.4	125				
Benzo(g,h,i)perylene	1.902	0.10	2.000		95.1	40.2	122				
Benzo(k)fluoranthene	1.787	0.050	2.000		89.4	45.5	122				
Chrysene	1.916	0.050	2.000		95.8	46	124				
Dibenz(a,h)anthracene	2.090	0.10	2.000		105	40.1	128				
Fluoranthene	1.987	0.10	2.000		99.4	58	127				
Fluorene	1.797	0.10	2.000		89.9	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **1501A32-015CMS** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.971	0.050	2.000		98.5	40.3	129				
Naphthalene	1.742	0.50	2.000		87.1	46.6	120				
Phenanthrene	1.696	0.050	2.000		84.8	50.6	122				
Pyrene	1.727	0.050	2.000		86.3	50.1	128				
Surr: 4-Terphenyl-d14	1.824	0	2.000		91.2	55.4	136				

Sample ID: **1501A32-015CMSD** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023770**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.901	0.50	2.000		95.1	45.6	120	1.761	7.66	29.4	
Acenaphthylene	1.817	1.0	2.000		90.9	48.3	124	1.710	6.09	32.5	
Anthracene	1.990	0.050	2.000		99.5	57.7	124	1.799	10.1	21.9	
Benz(a)anthracene	2.062	0.050	2.000		103	50.3	143	1.997	3.21	26.8	
Benzo(a)pyrene	1.848	0.050	2.000		92.4	44.2	127	1.772	4.19	40.9	
Benzo(b)fluoranthene	2.135	0.10	2.000		107	48.4	125	2.008	6.14	24.2	
Benzo(g,h,i)perylene	1.969	0.10	2.000		98.5	40.2	122	1.902	3.48	26.2	
Benzo(k)fluoranthene	1.899	0.050	2.000		94.9	45.5	122	1.787	6.04	23.3	
Chrysene	2.040	0.050	2.000		102	46	124	1.916	6.28	25	
Dibenz(a,h)anthracene	2.044	0.10	2.000		102	40.1	128	2.090	2.26	23.6	
Fluoranthene	2.088	0.10	2.000		104	58	127	1.987	4.94	23.5	
Fluorene	1.938	0.10	2.000		96.9	52.6	124	1.797	7.54	31.5	
Indeno(1,2,3-cd)pyrene	2.044	0.050	2.000		102	40.3	129	1.971	3.64	28.8	
Naphthalene	1.823	0.50	2.000		91.1	46.6	120	1.742	4.52	22.9	
Phenanthrene	1.834	0.050	2.000		91.7	50.6	122	1.696	7.80	20.2	
Pyrene	1.901	0.050	2.000		95.1	50.1	128	1.727	9.63	24.7	
Surr: 4-Terphenyl-d14	2.116	0	2.000		106	55.4	136	1.824	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201847

Sample ID: **MB-201847** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283836**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201847** Analysis Date: **01/16/2015** Seq No: **6016617**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.27	0	50.00		94.5	70.6	123				
Surr: Dibromofluoromethane	48.26	0	50.00		96.5	78.7	124				
Surr: Toluene-d8	48.41	0	50.00		96.8	81.3	120				

Sample ID: **LCS-201847** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283836**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201847** Analysis Date: **01/16/2015** Seq No: **6016616**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.38	5.0	50.00		94.8	72.8	128				
Toluene	47.64	5.0	50.00		95.3	74.9	127				
Trichloroethene	48.53	5.0	50.00		97.1	70.5	134				
Surr: 4-Bromofluorobenzene	47.65	0	50.00		95.3	70.6	123				
Surr: Dibromofluoromethane	48.24	0	50.00		96.5	78.7	124				
Surr: Toluene-d8	48.14	0	50.00		96.3	81.3	120				

Sample ID: **1501A82-003AMS** Client ID: **MW-507BR-2015115-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283839**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201847** Analysis Date: **01/19/2015** Seq No: **6016927**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.11	5.0	50.00		98.2	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201847

Sample ID: **1501A82-003AMS**	Client ID: **MW-507BR-2015115-01**	Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283839**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201847**	Analysis Date: **01/19/2015**	Seq No: **6016927**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	49.55	5.0	50.00		99.1	70.5	137				
Trichloroethene	51.31	5.0	50.00		103	71.8	139				
Surr: 4-Bromofluorobenzene	47.47	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	50.49	0	50.00		101	78.7	124				
Surr: Toluene-d8	48.70	0	50.00		97.4	81.3	120				

Sample ID: **1501A82-003AMSD**	Client ID: **MW-507BR-2015115-01**	Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283839**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201847**	Analysis Date: **01/19/2015**	Seq No: **6016983**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	48.51	5.0	50.00		97.0	70	135	49.11	1.23	20	
Toluene	49.19	5.0	50.00		98.4	70.5	137	49.55	0.729	20	
Trichloroethene	50.32	5.0	50.00		101	71.8	139	51.31	1.95	20	
Surr: 4-Bromofluorobenzene	47.58	0	50.00		95.2	70.6	123	47.47	0	0	
Surr: Dibromofluoromethane	49.20	0	50.00		98.4	78.7	124	50.49	0	0	
Surr: Toluene-d8	47.79	0	50.00		95.6	81.3	120	48.70	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **MB-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284173**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6024719**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.955	0	2.000		97.8	55.4	136				

Sample ID: **LCS-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.907	0.50	2.000		95.3	66.3	118				
Acenaphthylene	1.806	1.0	2.000		90.3	64	120				
Anthracene	2.021	0.050	2.000		101	64.6	127				
Benz(a)anthracene	2.059	0.050	2.000		103	60.6	137				
Benzo(a)pyrene	1.921	0.050	2.000		96.0	64	124				
Benzo(b)fluoranthene	2.333	0.10	2.000		117	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **LCS-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.856	0.10	2.000	0.02318	91.7	49.9	137				
Benzo(k)fluoranthene	1.974	0.050	2.000		98.7	61.7	137				
Chrysene	2.137	0.050	2.000		107	65.5	127				
Dibenz(a,h)anthracene	1.846	0.10	2.000		92.3	52.4	130				
Fluoranthene	2.118	0.10	2.000	0.01725	105	67	131				
Fluorene	1.917	0.10	2.000		95.9	68.3	120				
Indeno(1,2,3-cd)pyrene	2.036	0.050	2.000	0.02805	100	50.4	139				
Naphthalene	1.881	0.50	2.000		94.1	61.1	120				
Phenanthrene	1.867	0.050	2.000	0.01737	92.5	68	119				
Pyrene	1.984	0.050	2.000	0.02895	97.8	62	127				
Surr: 4-Terphenyl-d14	2.071	0	2.000		104	55.4	136				

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.808	0.50	2.000		90.4	45.6	120				
Acenaphthylene	1.730	1.0	2.000		86.5	48.3	124				
Anthracene	1.932	0.050	2.000		96.6	57.7	124				
Benz(a)anthracene	1.982	0.050	2.000		99.1	50.3	143				
Benzo(a)pyrene	1.740	0.050	2.000	0.01651	86.2	44.2	127				
Benzo(b)fluoranthene	1.831	0.10	2.000		91.5	48.4	125				
Benzo(g,h,i)perylene	1.539	0.10	2.000	0.04345	74.8	40.2	122				
Benzo(k)fluoranthene	1.867	0.050	2.000	0.01190	92.7	45.5	122				
Chrysene	2.015	0.050	2.000		101	46	124				
Dibenz(a,h)anthracene	1.481	0.10	2.000	0.03445	72.3	40.1	128				
Fluoranthene	2.037	0.10	2.000		102	58	127				
Fluorene	1.850	0.10	2.000		92.5	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.646	0.050	2.000	0.02057	81.3	40.3	129				
Naphthalene	1.897	0.50	2.000		94.9	46.6	120				
Phenanthrene	1.794	0.050	2.000	0.01564	88.9	50.6	122				
Pyrene	1.913	0.050	2.000		95.7	50.1	128				
Surr: 4-Terphenyl-d14	1.914	0	2.000		95.7	55.4	136				

Sample ID: **1501B49-002AMSD** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023786**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.674	0.50	2.000		83.7	45.6	120	1.808	7.67	29.4	
Acenaphthylene	1.591	1.0	2.000		79.6	48.3	124	1.730	8.37	32.5	
Anthracene	1.887	0.050	2.000		94.3	57.7	124	1.932	2.38	21.9	
Benz(a)anthracene	1.971	0.050	2.000		98.5	50.3	143	1.982	0.565	26.8	
Benzo(a)pyrene	1.664	0.050	2.000	0.01651	82.4	44.2	127	1.740	4.43	40.9	
Benzo(b)fluoranthene	1.742	0.10	2.000		87.1	48.4	125	1.831	4.98	24.2	
Benzo(g,h,i)perylene	1.459	0.10	2.000	0.04345	70.8	40.2	122	1.539	5.34	26.2	
Benzo(k)fluoranthene	1.741	0.050	2.000	0.01190	86.4	45.5	122	1.867	7.00	23.3	
Chrysene	2.060	0.050	2.000		103	46	124	2.015	2.18	25	
Dibenz(a,h)anthracene	1.371	0.10	2.000	0.03445	66.8	40.1	128	1.481	7.73	23.6	
Fluoranthene	2.043	0.10	2.000		102	58	127	2.037	0.287	23.5	
Fluorene	1.734	0.10	2.000		86.7	52.6	124	1.850	6.45	31.5	
Indeno(1,2,3-cd)pyrene	1.513	0.050	2.000	0.02057	74.6	40.3	129	1.646	8.43	28.8	
Naphthalene	1.791	0.50	2.000		89.5	46.6	120	1.897	5.77	22.9	
Phenanthrene	1.799	0.050	2.000	0.01564	89.1	50.6	122	1.794	0.258	20.2	
Pyrene	1.876	0.050	2.000		93.8	50.1	128	1.913	1.98	24.7	
Surr: 4-Terphenyl-d14	1.923	0	2.000		96.2	55.4	136	1.914	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201942

Sample ID: **MB-201942** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MBLK** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201942** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **LCS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020783**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2659	0.010	0.2500		106	90	110				

Sample ID: **1501A32-010EMS** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2653	0.010	0.2500	0.008100	103	90	110				

Sample ID: **1501A32-020EMS** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020805**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1988	0.010	0.2500	0.01230	74.6	90	110				S

Sample ID: **1501A32-010EMSD** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MSD** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020804**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2645	0.010	0.2500	0.008100	103	90	110	0.2653	0.302	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201963

Sample ID: **MB-201963**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023197**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201963**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023198**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005110	0.00020	0.0050		102	80	120				

Sample ID: **1501A58-006AMS**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023200**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005705	0.00020	0.0050		114	70	130				

Sample ID: **1501A58-006AMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023201**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005559	0.00020	0.0050		111	70	130	0.005705	2.59	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201979

Sample ID: **MB-201979** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023957**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201979** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.052	0.0200	1.000		105	80	120				
Arsenic	1.032	0.0500	1.000		103	80	120				
Barium	1.026	0.0200	1.000		103	80	120				
Beryllium	1.031	0.0100	1.000		103	80	120				
Cadmium	1.022	0.0050	1.000		102	80	120				
Chromium	1.011	0.0100	1.000		101	80	120				
Copper	1.024	0.0100	1.000		102	80	120				
Lead	1.025	0.0100	1.000		102	80	120				
Nickel	1.023	0.0200	1.000		102	80	120				
Selenium	1.013	0.0200	1.000		101	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201979

Sample ID: **LCS-201979** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	1.042	0.0200	1.000		104	80	120				
Vanadium	1.027	0.0100	1.000		103	80	120				
Zinc	1.035	0.0200	1.000		104	80	120				

Sample ID: **1501A41-001DMS** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023967**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.048	0.0200	1.000		105	75	125				
Arsenic	1.042	0.0500	1.000		104	75	125				
Barium	1.017	0.0200	1.000	0.001978	101	75	125				
Beryllium	1.039	0.0100	1.000		104	75	125				
Cadmium	1.028	0.0050	1.000		103	75	125				
Chromium	1.030	0.0100	1.000	0.0003168	103	75	125				
Copper	1.026	0.0100	1.000		103	75	125				
Lead	1.009	0.0100	1.000		101	75	125				
Nickel	1.019	0.0200	1.000		102	75	125				
Selenium	1.015	0.0200	1.000	0.002510	101	75	125				
Thallium	1.033	0.0200	1.000		103	75	125				
Vanadium	1.027	0.0100	1.000		103	75	125				
Zinc	1.046	0.0200	1.000		105	75	125				

Sample ID: **1501A41-001DMSD** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.021	0.0200	1.000		102	75	125	1.048	2.54	20	
Arsenic	1.028	0.0500	1.000		103	75	125	1.042	1.39	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201979

Sample ID: **1501A41-001DMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C**
Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	0.9957	0.0200	1.000	0.001978	99.4	75	125	1.017	2.09	20	
Beryllium	1.017	0.0100	1.000		102	75	125	1.039	2.14	20	
Cadmium	1.007	0.0050	1.000		101	75	125	1.028	2.07	20	
Chromium	1.005	0.0100	1.000	0.0003168	100	75	125	1.030	2.50	20	
Copper	1.004	0.0100	1.000		100	75	125	1.026	2.19	20	
Lead	0.9905	0.0100	1.000		99.0	75	125	1.009	1.90	20	
Nickel	0.9972	0.0200	1.000		99.7	75	125	1.019	2.17	20	
Selenium	1.013	0.0200	1.000	0.002510	101	75	125	1.015	0.124	20	
Thallium	1.011	0.0200	1.000		101	75	125	1.033	2.12	20	
Vanadium	1.005	0.0100	1.000		100	75	125	1.027	2.17	20	
Zinc	1.022	0.0200	1.000		102	75	125	1.046	2.36	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 202007

Sample ID: **MB-202007**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022673**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202007**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022674**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2707	0.010	0.2500		108	90	110				

Sample ID: **1501A82-008EMS**	Client ID: **MW-304-2015115-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022692**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2237	0.010	0.2500	0.009300	85.8	90	110				S

Sample ID: **1501B30-005CMS**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022694**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2276	0.010	0.2500	0.004800	89.1	90	110				S

Sample ID: **1501A82-008EMSD**	Client ID: **MW-304-2015115-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022693**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2240	0.010	0.2500	0.009300	85.9	90	110	0.2237	0.134	20	S

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R283869

Sample ID: **MB-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MBLK**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017335**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **LCS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017336**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4640	0.100	0.5000		92.8	85	115				

Sample ID: **1501A82-001FMS**	Client ID: **MW-509BR-2015115-01**			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017347**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4996	0.100	0.5000	0.08920	82.1	80	120				

Sample ID: **1501A82-001FMSD**	Client ID: **MW-509BR-2015115-01**			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MSD**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017348**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4968	0.100	0.5000	0.08920	81.5	80	120	0.4996	0.562	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **MB-R283956**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019521**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R283956**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019520**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.343	0.25	5.000	0.01013	107	90	110				
Sulfate	26.97	1.0	25.00		108	90	110				

Sample ID: **1501A82-001GMS**	Client ID: **MW-509BR-2015115-01**				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019550**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.028	0.25	5.000		80.6	90	110				S
Sulfate	28.30	1.0	25.00	4.646	94.6	90	110				

Sample ID: **1501B23-001BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019541**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.53	2.5	50.00	10.87	101	90	110				
Sulfate	280.7	10	250.0	24.16	103	90	110				

Sample ID: **1501B23-001BMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019542**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.62	2.5	50.00	10.87	101	90	110	61.53	0.133	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **1501B23-001BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **283956**
BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	265.2	10	250.0	24.16	96.4	90	110	280.7	5.71	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R284171

Sample ID: **MB-R284171**	Client ID:				Units: **mg/L**			Prep Date:		Run No: **284171**	
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R284171**			Analysis Date: **01/21/2015**		Seq No: **6024649**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501A32-010FDUP**	Client ID:				Units: **mg/L**			Prep Date:		Run No: **284171**	
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R284171**			Analysis Date: **01/21/2015**		Seq No: **6024667**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	3.030	1.00						3.020	0.331	20	H

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R284335

Sample ID: **MB-R284335**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028150**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501B40-001GDUP**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	7.710	1.00						7.730	0.259	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 26, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501B40

Analytical Environmental Services, Inc. received 5 samples on 1/16/2015 11:55:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501B40

Date: 01-15-2015 Page 1 of 1

COMPANY: ENVIRONMENTAL RESOURCES MANAGEMENT

ADDRESS: 3200 WINDY HILL RD SE SUITE 1500W ATLANTA, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: C. BROOKS, R. MAYETTE, A. NEAL, A. SHOREDITS, W. VIRGO

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC (8260B)	SVOC (8270B)	TOT METALS + Hg (6010B, 6020B, 7470A)	CYANIDE (9012A)	GASES RSK-175	FERROUS Fe SM3500	SULFATE+NITRATE (300.0)							REMARKS	No # of Containers
	PRESERVATION (See codes)						H	NA	N	NaOH	NA	NA	NA								
1	MW-503BR-20150115-01	01/15/2015	13:25	X		GW	2	2	1	1	2	1	1								10
2	MW-311-20150115-01	-11-	15:01																		10
3	MW-307 BR-20150115-01	-11-	16:40																		10
4	DUP-4-20150115-01	-11-	NA																		10
5	TB-01	NA	NA			W														One cooler.	2
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/16/2015 11:55	1: Latoya Reeves	1/16/15 11:55a
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER GREYHOUND OTHER DROPOFF

PROJECT INFORMATION

PROJECT NAME: ACLC AUGUSTA

PROJECT #: 0230712.52

SITE ADDRESS: 812 8th St AUGUSTA, GA 30901

SEND REPORT TO: greg.sirak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 42

Turnaround Time Request

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

STATE PROGRAM (if any):

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

DATA PACKAGE: I II III IV

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

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

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

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501B40

Case Narrative

Sample containers were not received for MNA analysis for samples "MW-307BR-20150115-01 and DUP-4-20150115-01." Per Andreas Shoredits via phone on 1/16/15 samples for MNA analysis were not collected.

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. F fraction samples were analyzed in the laboratory which is a deviation from the method.

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1501B40-003A, & -004A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-503BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 1:25:00 PM
Lab ID:	1501B40-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201976	1	01/22/2015 12:41	GK
Benzene	35	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Carbon disulfide	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Ethylbenzene	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Methylene chloride	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Toluene	12	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Trichloroethene	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Xylenes, Total	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Surr: 4-Bromofluorobenzene	97.7	70.6-123		%REC	201976	1	01/22/2015 12:41	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	201976	1	01/22/2015 12:41	GK
Surr: Toluene-d8	94.9	81.3-120		%REC	201976	1	01/22/2015 12:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201926	1	01/22/2015 17:33	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/22/2015 17:33	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/22/2015 17:33	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Surr: 4-Terphenyl-d14	77.1	55.4-136		%REC	201926	1	01/22/2015 17:33	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 14:59	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 18:34	JW
Sulfate	6.7	1.0		mg/L	R283956	1	01/16/2015 18:34	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-503BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 1:25:00 PM
Lab ID:	1501B40-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	8	4		ug/L	201798	1	01/16/2015 16:20	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.500		mg/L	R283869	5	01/16/2015 12:45	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.73	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	BRL	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:07	JL
Barium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:07	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Zinc	0.0378	0.0200		mg/L	202050	1	01/23/2015 20:07	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-311-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 3:01:00 PM
Lab ID:	1501B40-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201976	1	01/21/2015 18:40	GK
Benzene	370	50		ug/L	201976	10	01/22/2015 12:11	GK
Carbon disulfide	BRL	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Ethylbenzene	94	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Methylene chloride	BRL	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Toluene	9.6	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Trichloroethene	BRL	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Xylenes, Total	41	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Surr: 4-Bromofluorobenzene	97.8	70.6-123		%REC	201976	10	01/22/2015 12:11	GK
Surr: 4-Bromofluorobenzene	99.8	70.6-123		%REC	201976	1	01/21/2015 18:40	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201976	10	01/22/2015 12:11	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201976	1	01/21/2015 18:40	GK
Surr: Toluene-d8	94.8	81.3-120		%REC	201976	10	01/22/2015 12:11	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201976	1	01/21/2015 18:40	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	560	50		ug/L	201926	100	01/23/2015 10:38	YH
Acenaphthylene	3.2	1.0		ug/L	201926	1	01/22/2015 18:00	YH
Acenaphthene	13	5.0		ug/L	201926	100	01/23/2015 10:38	YH
Fluorene	5.5	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Phenanthrene	3.3	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Anthracene	0.56	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Surr: 4-Terphenyl-d14	90.3	55.4-136		%REC	201926	1	01/22/2015 18:00	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 14:48	JG
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-311-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 3:01:00 PM
Lab ID:	1501B40-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 18:49	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 18:49	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	410	40		ug/L	201798	10	01/16/2015 16:58	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	4.15	1.00		mg/L	R283869	10	01/16/2015 12:45	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.20	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	329	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:10	JL
Barium	0.185	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:10	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Zinc	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/16/2015 3:40:00 PM
Lab ID:	1501B40-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	5000		ug/L	201976	100	01/21/2015 17:10	GK
Benzene	12000	500		ug/L	201976	100	01/21/2015 17:10	GK
Carbon disulfide	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Ethylbenzene	2000	500		ug/L	201976	100	01/21/2015 17:10	GK
Methylene chloride	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Toluene	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Trichloroethene	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Xylenes, Total	720	500		ug/L	201976	100	01/21/2015 17:10	GK
Surr: 4-Bromofluorobenzene	96.4	70.6-123		%REC	201976	100	01/21/2015 17:10	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201976	100	01/21/2015 17:10	GK
Surr: Toluene-d8	94.1	81.3-120		%REC	201976	100	01/21/2015 17:10	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	6700	500		ug/L	201926	1000	01/23/2015 11:58	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/22/2015 18:27	YH
Acenaphthene	220	50		ug/L	201926	100	01/23/2015 11:05	YH
Fluorene	48	10		ug/L	201926	100	01/23/2015 11:05	YH
Phenanthrene	46	5.0		ug/L	201926	100	01/23/2015 11:05	YH
Anthracene	7.2	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Fluoranthene	3.5	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Pyrene	4.1	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Benz(a)anthracene	0.20	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Chrysene	0.13	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Surr: 4-Terphenyl-d14	93.5	55.4-136		%REC	201926	1	01/22/2015 18:27	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 15:05	JG
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:14	JL
Barium	0.804	0.0200		mg/L	202050	1	01/23/2015 20:14	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/16/2015 3:40:00 PM
Lab ID:	1501B40-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:14	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Zinc	0.0746	0.0200		mg/L	202050	1	01/23/2015 20:14	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-4-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501B40-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	5000		ug/L	201976	100	01/22/2015 11:41	GK
Benzene	12000	500		ug/L	201976	100	01/22/2015 11:41	GK
Carbon disulfide	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Ethylbenzene	2100	500		ug/L	201976	100	01/22/2015 11:41	GK
Methylene chloride	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Toluene	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Trichloroethene	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Xylenes, Total	770	500		ug/L	201976	100	01/22/2015 11:41	GK
Surr: 4-Bromofluorobenzene	97.1	70.6-123		%REC	201976	100	01/22/2015 11:41	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201976	100	01/22/2015 11:41	GK
Surr: Toluene-d8	94.8	81.3-120		%REC	201976	100	01/22/2015 11:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	8100	500		ug/L	201926	1000	01/23/2015 12:25	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/22/2015 18:54	YH
Acenaphthene	220	50		ug/L	201926	100	01/23/2015 11:32	YH
Fluorene	46	10		ug/L	201926	100	01/23/2015 11:32	YH
Phenanthrene	44	5.0		ug/L	201926	100	01/23/2015 11:32	YH
Anthracene	6.6	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Fluoranthene	3.1	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Pyrene	3.6	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Benz(a)anthracene	0.15	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Chrysene	0.11	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Surr: 4-Terphenyl-d14	94.1	55.4-136		%REC	201926	1	01/22/2015 18:54	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 15:07	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:18	JL
Barium	0.826	0.0200		mg/L	202050	1	01/23/2015 20:18	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-4-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501B40-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:18	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Zinc	0.0802	0.0200		mg/L	202050	1	01/23/2015 20:18	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501B40-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201976	1	01/21/2015 18:10	GK
Benzene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Carbon disulfide	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Ethylbenzene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Methylene chloride	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Toluene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Trichloroethene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Xylenes, Total	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Surr: 4-Bromofluorobenzene	93.7	70.6-123		%REC	201976	1	01/21/2015 18:10	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201976	1	01/21/2015 18:10	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201976	1	01/21/2015 18:10	GK

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1501B40

Checklist completed by [signature] 1/16/15
Signature Date

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

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

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

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

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

Cooler #1 3.4°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes __ No ✓

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by [signature]

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501B40

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501B40-001A	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/22/2015
1501B40-001B	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/16/2015 10:48:55AM	01/16/2015
1501B40-001C	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-001D	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015
1501B40-001D	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-001E	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-001F	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Ferrous Iron			01/16/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Alkalinity			01/20/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	ION SCAN			01/16/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501B40-002A	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/21/2015
1501B40-002A	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/22/2015
1501B40-002B	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	GC Analysis of Gaseous Samples		1/16/2015 10:48:55AM	01/16/2015
1501B40-002C	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-002C	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/23/2015
1501B40-002D	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015
1501B40-002D	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-002E	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-002F	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Ferrous Iron			01/16/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Alkalinity			01/20/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	ION SCAN			01/16/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501B40-003A	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/21/2015
1501B40-003B	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-003B	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/23/2015
1501B40-003C	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-003D	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015

Analytical Environmental Services, Inc

Date: 28-Jan-15

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501B40

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501B40-003D	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-004A	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/22/2015
1501B40-004B	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-004B	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/23/2015
1501B40-004C	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015
1501B40-004C	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-004D	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-005A	TB-01	1/15/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201798

Sample ID: **MB-201798**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019704**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201798**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019703**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	144.9	4	200.0		72.5	45.1	115				

Sample ID: **LCSD-201798**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019705**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	145.3	4	200.0		72.7	45.1	115	144.9	0.278	20	

Sample ID: **1501A98-003BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019718**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	132.3	4	200.0	11.60	60.4	40.4	115				

Sample ID: **1501A98-003BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019719**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	127.4	4	200.0	11.60	57.9	40.4	115	132.3	3.83	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **MB-201926**	Client ID:		Units: **ug/L**	Prep Date: **01/21/2015**	Run No: **284173**
SampleType: **MBLK**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201926**	Analysis Date: **01/21/2015**	Seq No: **6024719**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.955	0	2.000		97.8	55.4	136				

Sample ID: **LCS-201926**	Client ID:		Units: **ug/L**	Prep Date: **01/21/2015**	Run No: **284122**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201926**	Analysis Date: **01/21/2015**	Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.907	0.50	2.000		95.3	66.3	118				
Acenaphthylene	1.806	1.0	2.000		90.3	64	120				
Anthracene	2.021	0.050	2.000		101	64.6	127				
Benz(a)anthracene	2.059	0.050	2.000		103	60.6	137				
Benzo(a)pyrene	1.921	0.050	2.000		96.0	64	124				
Benzo(b)fluoranthene	2.333	0.10	2.000		117	56.4	133				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **LCS-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.856	0.10	2.000	0.02318	91.7	49.9	137				
Benzo(k)fluoranthene	1.974	0.050	2.000		98.7	61.7	137				
Chrysene	2.137	0.050	2.000		107	65.5	127				
Dibenz(a,h)anthracene	1.846	0.10	2.000		92.3	52.4	130				
Fluoranthene	2.118	0.10	2.000	0.01725	105	67	131				
Fluorene	1.917	0.10	2.000		95.9	68.3	120				
Indeno(1,2,3-cd)pyrene	2.036	0.050	2.000	0.02805	100	50.4	139				
Naphthalene	1.881	0.50	2.000		94.1	61.1	120				
Phenanthrene	1.867	0.050	2.000	0.01737	92.5	68	119				
Pyrene	1.984	0.050	2.000	0.02895	97.8	62	127				
Surr: 4-Terphenyl-d14	2.071	0	2.000		104	55.4	136				

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.808	0.50	2.000		90.4	45.6	120				
Acenaphthylene	1.730	1.0	2.000		86.5	48.3	124				
Anthracene	1.932	0.050	2.000		96.6	57.7	124				
Benz(a)anthracene	1.982	0.050	2.000		99.1	50.3	143				
Benzo(a)pyrene	1.740	0.050	2.000	0.01651	86.2	44.2	127				
Benzo(b)fluoranthene	1.831	0.10	2.000		91.5	48.4	125				
Benzo(g,h,i)perylene	1.539	0.10	2.000	0.04345	74.8	40.2	122				
Benzo(k)fluoranthene	1.867	0.050	2.000	0.01190	92.7	45.5	122				
Chrysene	2.015	0.050	2.000		101	46	124				
Dibenz(a,h)anthracene	1.481	0.10	2.000	0.03445	72.3	40.1	128				
Fluoranthene	2.037	0.10	2.000		102	58	127				
Fluorene	1.850	0.10	2.000		92.5	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.646	0.050	2.000	0.02057	81.3	40.3	129				
Naphthalene	1.897	0.50	2.000		94.9	46.6	120				
Phenanthrene	1.794	0.050	2.000	0.01564	88.9	50.6	122				
Pyrene	1.913	0.050	2.000		95.7	50.1	128				
Surr: 4-Terphenyl-d14	1.914	0	2.000		95.7	55.4	136				

Sample ID: **1501B49-002AMSD** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023786**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.674	0.50	2.000		83.7	45.6	120	1.808	7.67	29.4	
Acenaphthylene	1.591	1.0	2.000		79.6	48.3	124	1.730	8.37	32.5	
Anthracene	1.887	0.050	2.000		94.3	57.7	124	1.932	2.38	21.9	
Benz(a)anthracene	1.971	0.050	2.000		98.5	50.3	143	1.982	0.565	26.8	
Benzo(a)pyrene	1.664	0.050	2.000	0.01651	82.4	44.2	127	1.740	4.43	40.9	
Benzo(b)fluoranthene	1.742	0.10	2.000		87.1	48.4	125	1.831	4.98	24.2	
Benzo(g,h,i)perylene	1.459	0.10	2.000	0.04345	70.8	40.2	122	1.539	5.34	26.2	
Benzo(k)fluoranthene	1.741	0.050	2.000	0.01190	86.4	45.5	122	1.867	7.00	23.3	
Chrysene	2.060	0.050	2.000		103	46	124	2.015	2.18	25	
Dibenz(a,h)anthracene	1.371	0.10	2.000	0.03445	66.8	40.1	128	1.481	7.73	23.6	
Fluoranthene	2.043	0.10	2.000		102	58	127	2.037	0.287	23.5	
Fluorene	1.734	0.10	2.000		86.7	52.6	124	1.850	6.45	31.5	
Indeno(1,2,3-cd)pyrene	1.513	0.050	2.000	0.02057	74.6	40.3	129	1.646	8.43	28.8	
Naphthalene	1.791	0.50	2.000		89.5	46.6	120	1.897	5.77	22.9	
Phenanthrene	1.799	0.050	2.000	0.01564	89.1	50.6	122	1.794	0.258	20.2	
Pyrene	1.876	0.050	2.000		93.8	50.1	128	1.913	1.98	24.7	
Surr: 4-Terphenyl-d14	1.923	0	2.000		96.2	55.4	136	1.914	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201976

Sample ID: **MB-201976** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284016**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201976** Analysis Date: **01/21/2015** Seq No: **6022383**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.29	0	50.00		94.6	70.6	123				
Surr: Dibromofluoromethane	50.66	0	50.00		101	78.7	124				
Surr: Toluene-d8	48.16	0	50.00		96.3	81.3	120				

Sample ID: **LCS-201976** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284016**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201976** Analysis Date: **01/21/2015** Seq No: **6023270**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	48.93	5.0	50.00		97.9	72.8	128				
Toluene	44.93	5.0	50.00		89.9	74.9	127				
Trichloroethene	48.17	5.0	50.00		96.3	70.5	134				
Surr: 4-Bromofluorobenzene	48.06	0	50.00		96.1	70.6	123				
Surr: Dibromofluoromethane	47.93	0	50.00		95.9	78.7	124				
Surr: Toluene-d8	47.83	0	50.00		95.7	81.3	120				

Sample ID: **1501C28-001AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284016**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201976** Analysis Date: **01/21/2015** Seq No: **6022428**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	44.89	5.0	50.00		89.8	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201976

Sample ID: **1501C28-001AMS**	Client ID:				Units: **ug/L**		Prep Date: **01/21/2015**		Run No: **284016**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201976**		Analysis Date: **01/21/2015**		Seq No: **6022428**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Toluene	45.96	5.0	50.00		91.9	70.5	137			
Trichloroethene	53.55	5.0	50.00	10.64	85.8	71.8	139			
Surr: 4-Bromofluorobenzene	47.38	0	50.00		94.8	70.6	123			
Surr: Dibromofluoromethane	51.04	0	50.00		102	78.7	124			
Surr: Toluene-d8	47.65	0	50.00		95.3	81.3	120			

Sample ID: **1501C28-001AMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/21/2015**		Run No: **284016**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201976**		Analysis Date: **01/21/2015**		Seq No: **6022558**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Benzene	44.56	5.0	50.00		89.1	70	135	44.89	0.738	20
Toluene	45.48	5.0	50.00		91.0	70.5	137	45.96	1.05	20
Trichloroethene	51.66	5.0	50.00	10.64	82.0	71.8	139	53.55	3.59	20
Surr: 4-Bromofluorobenzene	46.98	0	50.00		94.0	70.6	123	47.38	0	0
Surr: Dibromofluoromethane	50.75	0	50.00		102	78.7	124	51.04	0	0
Surr: Toluene-d8	48.07	0	50.00		96.1	81.3	120	47.65	0	0

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202001

Sample ID: **MB-202001**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025453**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-202001**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025459**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004909	0.00020	0.0050		98.2	80	120				

Sample ID: **1501B40-002DMS**	Client ID: **MW-311-20150115-01**				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025461**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004029	0.00020	0.0050		80.6	70	130				

Sample ID: **1501B40-002DMSD**	Client ID: **MW-311-20150115-01**				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025462**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004275	0.00020	0.0050		85.5	70	130	0.004029	5.92	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202007

Sample ID: **MB-202007** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MBLK** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202007** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **LCS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022674**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2707	0.010	0.2500		108	90	110				

Sample ID: **1501A82-008EMS** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022692**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2237	0.010	0.2500	0.009300	85.8	90	110				S

Sample ID: **1501B30-005CMS** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022694**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2276	0.010	0.2500	0.004800	89.1	90	110				S

Sample ID: **1501A82-008EMSD** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MSD** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022693**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2240	0.010	0.2500	0.009300	85.9	90	110	0.2237	0.134	20	S

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202050

Sample ID: **MB-202050** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-202050** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027959**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.009	0.0200	1.000		101	80	120				
Arsenic	0.9989	0.0500	1.000		99.9	80	120				
Barium	0.9977	0.0200	1.000		99.8	80	120				
Beryllium	0.9985	0.0100	1.000		99.8	80	120				
Cadmium	0.9993	0.0050	1.000		99.9	80	120				
Chromium	0.9785	0.0100	1.000	0.0006854	97.8	80	120				
Copper	0.9393	0.0100	1.000		93.9	80	120				
Lead	0.9934	0.0100	1.000		99.3	80	120				
Nickel	1.009	0.0200	1.000	0.0006010	101	80	120				
Selenium	0.9760	0.0200	1.000		97.6	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202050

Sample ID: **LCS-202050** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027959**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	0.9828	0.0200	1.000		98.3	80	120				
Vanadium	0.9823	0.0100	1.000		98.2	80	120				
Zinc	1.008	0.0200	1.000	0.005860	100	80	120				

Sample ID: **1501A97-001BMS** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027961**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.018	0.0200	1.000		102	75	125				
Arsenic	1.006	0.0500	1.000		101	75	125				
Barium	1.026	0.0200	1.000	0.03357	99.3	75	125				
Beryllium	1.008	0.0100	1.000		101	75	125				
Cadmium	1.004	0.0050	1.000		100	75	125				
Chromium	0.9831	0.0100	1.000	0.003652	97.9	75	125				
Copper	0.9519	0.0100	1.000		95.2	75	125				
Lead	0.9945	0.0100	1.000		99.4	75	125				
Nickel	1.011	0.0200	1.000		101	75	125				
Selenium	0.9878	0.0200	1.000		98.8	75	125				
Thallium	0.9824	0.0200	1.000		98.2	75	125				
Vanadium	0.9896	0.0100	1.000		99.0	75	125				
Zinc	1.018	0.0200	1.000	0.005782	101	75	125				

Sample ID: **1501A97-001BMSD** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027962**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.027	0.0200	1.000		103	75	125	1.018	0.907	20	
Arsenic	1.022	0.0500	1.000		102	75	125	1.006	1.53	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202050

Sample ID: **1501A97-001BMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C**
Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027962**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	1.026	0.0200	1.000	0.03357	99.3	75	125	1.026	0.002	20	
Beryllium	1.020	0.0100	1.000		102	75	125	1.008	1.14	20	
Cadmium	1.015	0.0050	1.000		102	75	125	1.004	1.15	20	
Chromium	0.9926	0.0100	1.000	0.003652	98.9	75	125	0.9831	0.965	20	
Copper	0.9586	0.0100	1.000		95.9	75	125	0.9519	0.705	20	
Lead	1.004	0.0100	1.000		100	75	125	0.9945	0.925	20	
Nickel	1.020	0.0200	1.000		102	75	125	1.011	0.963	20	
Selenium	1.009	0.0200	1.000		101	75	125	0.9878	2.12	20	
Thallium	0.9961	0.0200	1.000		99.6	75	125	0.9824	1.39	20	
Vanadium	0.9993	0.0100	1.000		99.9	75	125	0.9896	0.977	20	
Zinc	1.029	0.0200	1.000	0.005782	102	75	125	1.018	1.08	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R283869

Sample ID: **MB-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MBLK**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017335**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **LCS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017336**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4640	0.100	0.5000		92.8	85	115				

Sample ID: **1501A82-001FMS**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017347**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4996	0.100	0.5000	0.08920	82.1	80	120				

Sample ID: **1501A82-001FMSD**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MSD**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017348**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4968	0.100	0.5000	0.08920	81.5	80	120	0.4996	0.562	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **MB-R283956** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019521**

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

Sample ID: **LCS-R283956** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019520**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.343	0.25	5.000	0.01013	107	90	110				
Sulfate	26.97	1.0	25.00		108	90	110				

Sample ID: **1501A82-001GMS** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019550**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.028	0.25	5.000		80.6	90	110				S
Sulfate	28.30	1.0	25.00	4.646	94.6	90	110				

Sample ID: **1501B23-001BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019541**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.53	2.5	50.00	10.87	101	90	110				
Sulfate	280.7	10	250.0	24.16	103	90	110				

Sample ID: **1501B23-001BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.62	2.5	50.00	10.87	101	90	110	61.53	0.133	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **1501B23-001BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **283956**
BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	265.2	10	250.0	24.16	96.4	90	110	280.7	5.71	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R284335

Sample ID: **MB-R284335**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028150**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501B40-001GDUP**	Client ID: **MW-503BR-20150115-01**			Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	7.710	1.00						7.730	0.259	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 18, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501N94

Analytical Environmental Services, Inc. received 8 samples on 1/30/2015 11:02:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501N94

Date: 1/29/15 Page 1 of 1

COMPANY:	ADDRESS:
ERM	3200 Windy Hill Rd SE Ste 1500w Atlanta, GA 30339
PHONE: 678-230-7604	FAX:
SAMPLED BY: B. Mitchell / Barrett Escher / Don Dowling	SIGNATURE: Donald Dowling

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) H+	NaOH	I	I	I	ANALYSIS REQUESTED 8260B	8270C (PAH)	6010B - Mod metals + mercury	9012A - cyanide	Fe 2+	O_2, CO_2	Sulfate/Nitrate	REMARKS	No # of Containers
1	TB-01-20150129-01	1-29-15	—	X		W	X													2
2	~~DUP~~ DUP-05-20150129-01		1600			GW		X	X	X										6
3	DUP-06-20150129-01		1600									X	X	X					MNA included	6
4	MW-308BR-20150129-01		1030																	6
5	MW-307D-20150129-01		1257																	6
6	MW-207-20150129-01		1425																	6
7	MW-207MS-20150129-01		1425																	6
8	MW-207MSD-20150129-01		1425																	6
9	MW-401SAP-20150129-01		1530									X	X	X						10
10	MW-401SAPMS-20150129-01		1530																	10
11	MW-401SAPMSD-20150129-01		1530																	10
12	MW-309BR-20150129-01		1640																	10
13	MW-309BRMS-20150129-01		1640																	10
14	MW-309BRMSD-20150129-01	↓	1640	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓		10

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Bill Mitchell	01-30-15 11:02	1: Cataya Reeves	1/30/15 11:02a
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:
Fe2+ shorthold

SHIPMENT METHOD
OUT / /
IN / /
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: AGLC Augusta
PROJECT #: 0230712 ph052
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg Jirak
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 104

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

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

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

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

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501N94

Case Narrative

Sample Receiving Nonconformance:

Samples for Dissolved Oxygen analysis by Method SM4500-O-G were received and analyzed outside of the method specified holding time of “immediate or 15 minutes”.

Methane analysis was not listed on the COC but was reported per project requirements for samples 1501N94-003, -007, and -008.

Volatile Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1501N94-002A and -004A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. Samples requiring Ferrous Iron were analyzed in the laboratory which is a deviation from the method.

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015
Lab ID:	1501N94-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	202589	1	02/03/2015 15:51	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Surr: 4-Bromofluorobenzene	107	70.6-123		%REC	202589	1	02/03/2015 15:51	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	202589	1	02/03/2015 15:51	GK
Surr: Toluene-d8	97.9	81.3-120		%REC	202589	1	02/03/2015 15:51	GK

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-05-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	2500		ug/L	202589	50	02/03/2015 16:21	GK
Benzene	6100	250		ug/L	202589	50	02/03/2015 16:21	GK
Carbon disulfide	BRL	250		ug/L	202589	50	02/03/2015 16:21	GK
Ethylbenzene	720	250		ug/L	202589	50	02/03/2015 16:21	GK
Methylene chloride	BRL	250		ug/L	202589	50	02/03/2015 16:21	GK
Toluene	1900	250		ug/L	202589	50	02/03/2015 16:21	GK
Trichloroethene	BRL	250		ug/L	202589	50	02/03/2015 16:21	GK
Xylenes, Total	740	250		ug/L	202589	50	02/03/2015 16:21	GK
Surr: 4-Bromofluorobenzene	96.8	70.6-123		%REC	202589	50	02/03/2015 16:21	GK
Surr: Dibromofluoromethane	98.6	78.7-124		%REC	202589	50	02/03/2015 16:21	GK
Surr: Toluene-d8	96.4	81.3-120		%REC	202589	50	02/03/2015 16:21	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	3200	500		ug/L	202663	1000	02/05/2015 18:05	YH
Acenaphthylene	63	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Acenaphthene	46	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Fluorene	21	10		ug/L	202663	100	02/06/2015 10:22	YH
Phenanthrene	29	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Anthracene	7.5	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Fluoranthene	12	10		ug/L	202663	100	02/06/2015 10:22	YH
Pyrene	19	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Benz(a)anthracene	9.9	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Chrysene	8.3	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Benzo(b)fluoranthene	10	10		ug/L	202663	100	02/06/2015 10:22	YH
Benzo(k)fluoranthene	3.2	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Benzo(a)pyrene	11	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Indeno(1,2,3-cd)pyrene	4.9	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Dibenz(a,h)anthracene	1.2	0.10		ug/L	202663	1	02/05/2015 16:02	YH
Benzo(g,h,i)perylene	6.2	0.10		ug/L	202663	1	02/05/2015 16:02	YH
Surr: 4-Terphenyl-d14	77.7	55.4-136		%REC	202663	1	02/05/2015 16:02	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 10:15	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:02	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:02	JL
Barium	1.15	0.0200		mg/L	202561	1	02/04/2015 23:02	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-05-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:02	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:02	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:11	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:02	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Zinc	0.0508	0.0200		mg/L	202561	1	02/04/2015 23:02	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-06-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 17:21	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Trichloroethene	20	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Surr: 4-Bromofluorobenzene	90.8	70.6-123		%REC	202589	1	02/03/2015 17:21	GK
Surr: Dibromofluoromethane	99.3	78.7-124		%REC	202589	1	02/03/2015 17:21	GK
Surr: Toluene-d8	103	81.3-120		%REC	202589	1	02/03/2015 17:21	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 16:28	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 16:28	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 16:28	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Surr: 4-Terphenyl-d14	81.8	55.4-136		%REC	202663	1	02/05/2015 16:28	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	0.00034	0.00020		mg/L	203295	1	02/17/2015 16:49	JG
ION SCAN SW9056A								
Nitrate	2.4	0.25		mg/L	R285097	1	01/30/2015 14:38	JW
Sulfate	41	1.0		mg/L	R285097	1	01/30/2015 14:38	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-06-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	202520	1	02/03/2015 10:41	SH
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R284868	1	01/30/2015 14:25	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.45	1.00	H	mg/L	R285387	1	02/09/2015 12:00	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	60.4	10.0		mg/L	R285013	1	02/03/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:06	JL
Barium	0.0566	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:06	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:14	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-308BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 10:30:00 AM
Lab ID:	1501N94-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	2500		ug/L	202589	50	02/03/2015 16:51	GK
Benzene	6600	250		ug/L	202589	50	02/03/2015 16:51	GK
Carbon disulfide	BRL	250		ug/L	202589	50	02/03/2015 16:51	GK
Ethylbenzene	810	250		ug/L	202589	50	02/03/2015 16:51	GK
Methylene chloride	BRL	250		ug/L	202589	50	02/03/2015 16:51	GK
Toluene	2100	250		ug/L	202589	50	02/03/2015 16:51	GK
Trichloroethene	BRL	250		ug/L	202589	50	02/03/2015 16:51	GK
Xylenes, Total	880	250		ug/L	202589	50	02/03/2015 16:51	GK
Surr: 4-Bromofluorobenzene	97.4	70.6-123		%REC	202589	50	02/03/2015 16:51	GK
Surr: Dibromofluoromethane	99.8	78.7-124		%REC	202589	50	02/03/2015 16:51	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	202589	50	02/03/2015 16:51	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	3400	500		ug/L	202663	1000	02/05/2015 18:30	YH
Acenaphthylene	66	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Acenaphthene	46	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Fluorene	22	10		ug/L	202663	100	02/06/2015 10:49	YH
Phenanthrene	28	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Anthracene	7.0	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Fluoranthene	12	10		ug/L	202663	100	02/06/2015 10:49	YH
Pyrene	17	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Benz(a)anthracene	9.6	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Chrysene	7.8	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(b)fluoranthene	10.0	0.10		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(k)fluoranthene	3.3	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(a)pyrene	11	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Indeno(1,2,3-cd)pyrene	4.8	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Dibenz(a,h)anthracene	1.1	0.10		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(g,h,i)perylene	5.9	0.10		ug/L	202663	1	02/05/2015 17:21	YH
Surr: 4-Terphenyl-d14	79.5	55.4-136		%REC	202663	1	02/05/2015 17:21	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 10:19	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:09	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:09	JL
Barium	1.11	0.0200		mg/L	202561	1	02/04/2015 23:09	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-308BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 10:30:00 AM
Lab ID:	1501N94-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:09	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:09	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:18	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:09	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Zinc	0.0472	0.0200		mg/L	202561	1	02/04/2015 23:09	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 12:57:00 PM
Lab ID:	1501N94-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 17:51	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Surr: 4-Bromofluorobenzene	93.7	70.6-123		%REC	202589	1	02/03/2015 17:51	GK
Surr: Dibromofluoromethane	99	78.7-124		%REC	202589	1	02/03/2015 17:51	GK
Surr: Toluene-d8	97.4	81.3-120		%REC	202589	1	02/03/2015 17:51	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 16:55	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 16:55	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 16:55	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Pyrene	0.079	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Surr: 4-Terphenyl-d14	81.8	55.4-136		%REC	202663	1	02/05/2015 16:55	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 10:21	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:20	JL
Barium	0.0712	0.0200		mg/L	202561	1	02/04/2015 23:20	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 12:57:00 PM
Lab ID:	1501N94-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:20	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:22	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 2:25:00 PM
Lab ID:	1501N94-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 15:21	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Surr: 4-Bromofluorobenzene	96.2	70.6-123		%REC	202589	1	02/03/2015 15:21	GK
Surr: Dibromofluoromethane	104	78.7-124		%REC	202589	1	02/03/2015 15:21	GK
Surr: Toluene-d8	95.1	81.3-120		%REC	202589	1	02/03/2015 15:21	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 17:48	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 17:48	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 17:48	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Anthracene	0.051	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Surr: 4-Terphenyl-d14	74.8	55.4-136		%REC	202663	1	02/05/2015 17:48	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 09:34	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 13:55	JL
Barium	0.323	0.0200		mg/L	202561	1	02/04/2015 13:55	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 2:25:00 PM
Lab ID:	1501N94-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 13:55	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Selenium	0.0687	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 3:30:00 PM
Lab ID:	1501N94-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 18:21	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Trichloroethene	19	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Surr: 4-Bromofluorobenzene	94.1	70.6-123		%REC	202589	1	02/03/2015 18:21	GK
Surr: Dibromofluoromethane	99.5	78.7-124		%REC	202589	1	02/03/2015 18:21	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	202589	1	02/03/2015 18:21	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 18:13	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 18:13	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 18:13	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Surr: 4-Terphenyl-d14	79.8	55.4-136		%REC	202663	1	02/05/2015 18:13	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	0.00036	0.00020		mg/L	203295	1	02/17/2015 16:41	JG
ION SCAN SW9056A								
Nitrate	2.6	0.25		mg/L	R285097	1	01/30/2015 14:53	JW
Sulfate	43	1.0		mg/L	R285097	1	01/30/2015 14:53	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 3:30:00 PM
Lab ID:	1501N94-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	202519	1	02/02/2015 18:44	SH
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R284868	1	01/30/2015 14:25	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.44	1.00	H	mg/L	R285387	1	02/09/2015 12:00	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	65.5	10.0		mg/L	R285013	1	02/03/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 21:51	JL
Barium	0.0576	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 21:51	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:25	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:40:00 PM
Lab ID:	1501N94-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 18:51	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Surr: 4-Bromofluorobenzene	85.8	70.6-123		%REC	202589	1	02/03/2015 18:51	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	202589	1	02/03/2015 18:51	GK
Surr: Toluene-d8	120	81.3-120		%REC	202589	1	02/03/2015 18:51	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 18:40	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 18:40	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 18:40	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Surr: 4-Terphenyl-d14	74.2	55.4-136		%REC	202663	1	02/05/2015 18:40	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 09:52	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R285097	1	01/30/2015 15:08	JW
Sulfate	BRL	1.0		mg/L	R285097	1	01/30/2015 15:08	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:40:00 PM
Lab ID:	1501N94-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	120	4		ug/L	202520	1	02/03/2015 10:47	SH
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.119	0.100		mg/L	R284868	1	01/30/2015 14:25	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.46	1.00	H	mg/L	R285387	1	02/09/2015 12:00	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	47.3	10.0		mg/L	R285013	1	02/03/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 22:10	JL
Barium	0.143	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 22:10	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Copper	0.0348	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:28	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EAM Work Order Number 1501N94

Checklist completed by [signature] 11/30/15
Signature Date

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

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

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

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

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

Cooler #1 3.1° Cooler #2 3.9° Cooler #3 3.8 Cooler #4 3.6' Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by MS

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Analytical Environmental Services, Inc

Date: 18-Feb-15

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501N94

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501N94-001A	TB-01-20150129-01	1/29/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-002A	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-002B	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-002B	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/06/2015
1501N94-002C	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-002C	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-002C	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-002D	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-003A	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-003B	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	GC Analysis of Gaseous Samples		2/3/2015 10:07:24AM	02/03/2015
1501N94-003C	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-003D	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-003D	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-003D	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL MERCURY		2/17/2015 2:00:00PM	02/17/2015
1501N94-003E	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-003F	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Ferrous Iron			01/30/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Alkalinity			02/03/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	ION SCAN			01/30/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			02/09/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			02/03/2015
1501N94-004A	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-004B	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-004B	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/06/2015
1501N94-004C	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-004C	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-004C	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-004D	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-005A	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-005B	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501N94

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501N94-005C	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-005C	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-005C	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-005D	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-006A	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-006B	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-006C	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-006C	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-006D	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-007A	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-007B	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	GC Analysis of Gaseous Samples		2/2/2015 10:05:25AM	02/02/2015
1501N94-007C	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-007D	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-007D	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-007D	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	TOTAL MERCURY		2/17/2015 2:00:00PM	02/17/2015
1501N94-007E	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-007F	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Ferrous Iron			01/30/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Alkalinity			02/03/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	ION SCAN			01/30/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			02/09/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			02/03/2015
1501N94-008A	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-008B	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	GC Analysis of Gaseous Samples		2/3/2015 10:07:24AM	02/03/2015
1501N94-008C	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-008D	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-008D	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-008D	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-008E	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-008F	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Ferrous Iron			01/30/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501N94

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Alkalinity			02/03/2015
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	ION SCAN			01/30/2015
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			02/09/2015
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			02/03/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202519

Sample ID: **MB-202519**	Client ID:				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6042716**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-202519**	Client ID:				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6042717**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	121.9	4	200.0		61.0	45.1	115				

Sample ID: **LCSD-202519**	Client ID:				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6042718**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	113.6	4	200.0		56.8	45.1	115	121.9	7.10	20	

Sample ID: **1501N94-007BMS**	Client ID: **MW-401SAP-20150129-01**				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6044465**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	108.0	4	200.0		54.0	40.4	115				

Sample ID: **1501N94-007BMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6044467**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	103.4	4	200.0		51.7	40.4	115	108.0	4.38	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202520

Sample ID: **MB-202520**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044476**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-202520**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044477**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	113.8	4	200.0		56.9	45.1	115				

Sample ID: **LCSD-202520**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044478**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	112.2	4	200.0		56.1	45.1	115	113.8	1.43	20	

Sample ID: **1501N94-008BMS**	Client ID: **MW-309BR-20150129-01**				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044481**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	431.2	4	200.0	270.6	80.3	40.4	115				

Sample ID: **1502030-004AMS**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044489**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	230.5	4	200.0	115.1	57.7	40.4	115				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202520

Sample ID: **1501N94-008BMSD** Client ID: **MW-309BR-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **285001**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **202520** Analysis Date: **02/03/2015** Seq No: **6044482**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	416.3	4	200.0	270.6	72.8	40.4	115	431.2	3.52	20	

Sample ID: **1502030-004AMSD** Client ID: Units: **ug/L** Prep Date: **02/03/2015** Run No: **285001**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **202520** Analysis Date: **02/03/2015** Seq No: **6044490**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	236.4	4	200.0	115.1	60.6	40.4	115	230.5	2.54	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **MB-202561** Client ID: Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048340**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-202561** Client ID: Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048341**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.007	0.0200	1.000		101	80	120				
Arsenic	0.9921	0.0500	1.000		99.2	80	120				
Barium	1.005	0.0200	1.000		100	80	120				
Beryllium	1.011	0.0100	1.000		101	80	120				
Cadmium	1.011	0.0050	1.000		101	80	120				
Chromium	1.006	0.0100	1.000		101	80	120				
Copper	1.020	0.0100	1.000		102	80	120				
Lead	1.005	0.0100	1.000		101	80	120				
Nickel	1.007	0.0200	1.000		101	80	120				
Selenium	0.9252	0.0200	1.000	0.005792	91.9	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **LCS-202561** Client ID: Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048341**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	0.9981	0.0200	1.000		99.8	80	120				
Vanadium	1.011	0.0100	1.000		101	80	120				
Zinc	1.013	0.0200	1.000	0.007427	101	80	120				

Sample ID: **1501N94-006CMS** Client ID: **MW-207-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048343**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9752	0.0200	1.000		97.5	75	125				
Arsenic	0.9664	0.0500	1.000	0.01718	94.9	75	125				
Barium	1.282	0.0200	1.000	0.3231	95.9	75	125				
Beryllium	0.9733	0.0100	1.000		97.3	75	125				
Cadmium	0.9800	0.0050	1.000		98.0	75	125				
Chromium	0.9832	0.0100	1.000	0.001571	98.2	75	125				
Copper	0.9939	0.0100	1.000		99.4	75	125				
Lead	0.9564	0.0100	1.000		95.6	75	125				
Nickel	0.9518	0.0200	1.000	0.002675	94.9	75	125				
Selenium	0.9133	0.0200	1.000	0.06867	84.5	75	125				
Thallium	0.9531	0.0200	1.000		95.3	75	125				
Vanadium	0.9839	0.0100	1.000	0.002868	98.1	75	125				
Zinc	0.9830	0.0200	1.000	0.01811	96.5	75	125				

Sample ID: **1501N94-007DMS** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049403**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9860	0.0200	1.000		98.6	75	125				
Arsenic	0.9628	0.0500	1.000		96.3	75	125				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **1501N94-007DMS** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049403**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	1.030	0.0200	1.000	0.05764	97.3	75	125				
Beryllium	0.9820	0.0100	1.000		98.2	75	125				
Cadmium	0.9861	0.0050	1.000		98.6	75	125				
Chromium	0.9834	0.0100	1.000	0.001381	98.2	75	125				
Copper	1.001	0.0100	1.000		100	75	125				
Lead	0.9711	0.0100	1.000		97.1	75	125				
Nickel	0.9535	0.0200	1.000		95.3	75	125				
Selenium	0.8881	0.0200	1.000	0.01321	87.5	75	125				
Thallium	0.9766	0.0200	1.000		97.7	75	125				
Vanadium	0.9931	0.0100	1.000		99.3	75	125				
Zinc	0.9749	0.0200	1.000	0.01230	96.3	75	125				

Sample ID: **1501N94-008DMS** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049408**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.010	0.0200	1.000		101	75	125				
Arsenic	0.9814	0.0500	1.000	0.01593	96.6	75	125				
Barium	1.142	0.0200	1.000	0.1429	99.9	75	125				
Beryllium	0.9961	0.0100	1.000		99.6	75	125				
Cadmium	1.003	0.0050	1.000	0.003844	99.9	75	125				
Chromium	1.011	0.0100	1.000	0.001575	101	75	125				
Copper	1.033	0.0100	1.000	0.03484	99.8	75	125				
Lead	0.9954	0.0100	1.000		99.5	75	125				
Nickel	0.9840	0.0200	1.000		98.4	75	125				
Selenium	0.9478	0.0200	1.000	0.07263	87.5	75	125				
Thallium	1.002	0.0200	1.000		100	75	125				
Vanadium	1.013	0.0100	1.000	0.0007756	101	75	125				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **1501N94-008DMS** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049408**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	0.9925	0.0200	1.000	0.01295	98.0	75	125				

Sample ID: **1501N94-006CMSD** Client ID: **MW-207-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048344**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9813	0.0200	1.000		98.1	75	125	0.9752	0.626	20	
Arsenic	0.9879	0.0500	1.000	0.01718	97.1	75	125	0.9664	2.20	20	
Barium	1.295	0.0200	1.000	0.3231	97.1	75	125	1.282	0.998	20	
Beryllium	0.9817	0.0100	1.000		98.2	75	125	0.9733	0.859	20	
Cadmium	0.9888	0.0050	1.000		98.9	75	125	0.9800	0.897	20	
Chromium	0.9899	0.0100	1.000	0.001571	98.8	75	125	0.9832	0.671	20	
Copper	1.003	0.0100	1.000		100	75	125	0.9939	0.881	20	
Lead	0.9634	0.0100	1.000		96.3	75	125	0.9564	0.732	20	
Nickel	0.9588	0.0200	1.000	0.002675	95.6	75	125	0.9518	0.733	20	
Selenium	0.9998	0.0200	1.000	0.06867	93.1	75	125	0.9133	9.04	20	
Thallium	0.9554	0.0200	1.000		95.5	75	125	0.9531	0.243	20	
Vanadium	0.9903	0.0100	1.000	0.002868	98.7	75	125	0.9839	0.645	20	
Zinc	0.9894	0.0200	1.000	0.01811	97.1	75	125	0.9830	0.644	20	

Sample ID: **1501N94-007DMSD** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049404**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9793	0.0200	1.000		97.9	75	125	0.9860	0.673	20	
Arsenic	0.9723	0.0500	1.000		97.2	75	125	0.9628	0.978	20	
Barium	1.023	0.0200	1.000	0.05764	96.5	75	125	1.030	0.725	20	
Beryllium	0.9759	0.0100	1.000		97.6	75	125	0.9820	0.618	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **1501N94-007DMSD** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049404**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cadmium	0.9812	0.0050	1.000		98.1	75	125	0.9861	0.501	20	
Chromium	0.9764	0.0100	1.000	0.001381	97.5	75	125	0.9834	0.711	20	
Copper	0.9945	0.0100	1.000		99.4	75	125	1.001	0.659	20	
Lead	0.9658	0.0100	1.000		96.6	75	125	0.9711	0.548	20	
Nickel	0.9466	0.0200	1.000		94.7	75	125	0.9535	0.717	20	
Selenium	1.008	0.0200	1.000	0.01321	99.5	75	125	0.8881	12.7	20	
Thallium	0.9726	0.0200	1.000		97.3	75	125	0.9766	0.411	20	
Vanadium	0.9871	0.0100	1.000		98.7	75	125	0.9931	0.603	20	
Zinc	0.9726	0.0200	1.000	0.01230	96.0	75	125	0.9749	0.233	20	

Sample ID: **1501N94-008DMSD** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9933	0.0200	1.000		99.3	75	125	1.010	1.62	20	
Arsenic	0.9807	0.0500	1.000	0.01593	96.5	75	125	0.9814	0.076	20	
Barium	1.125	0.0200	1.000	0.1429	98.2	75	125	1.142	1.48	20	
Beryllium	0.9803	0.0100	1.000		98.0	75	125	0.9961	1.60	20	
Cadmium	0.9883	0.0050	1.000	0.003844	98.4	75	125	1.003	1.43	20	
Chromium	0.9957	0.0100	1.000	0.001575	99.4	75	125	1.011	1.56	20	
Copper	1.017	0.0100	1.000	0.03484	98.3	75	125	1.033	1.50	20	
Lead	0.9763	0.0100	1.000		97.6	75	125	0.9954	1.94	20	
Nickel	0.9717	0.0200	1.000		97.2	75	125	0.9840	1.26	20	
Selenium	1.029	0.0200	1.000	0.07263	95.6	75	125	0.9478	8.20	20	
Thallium	0.9868	0.0200	1.000		98.7	75	125	1.002	1.49	20	
Vanadium	0.9958	0.0100	1.000	0.0007756	99.5	75	125	1.013	1.69	20	
Zinc	0.9778	0.0200	1.000	0.01295	96.5	75	125	0.9925	1.50	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202589

Sample ID: **MB-202589** Client ID: Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6043727**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.21	0	50.00		94.4	70.6	123				
Surr: Dibromofluoromethane	49.63	0	50.00		99.3	78.7	124				
Surr: Toluene-d8	48.84	0	50.00		97.7	81.3	120				

Sample ID: **LCS-202589** Client ID: Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6043725**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.55	5.0	50.00		99.1	72.8	128				
Toluene	48.87	5.0	50.00		97.7	74.9	127				
Trichloroethene	48.07	5.0	50.00		96.1	70.5	134				
Surr: 4-Bromofluorobenzene	47.43	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	49.31	0	50.00		98.6	78.7	124				
Surr: Toluene-d8	48.11	0	50.00		96.2	81.3	120				

Sample ID: **1501N94-006AMS** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6045218**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	50.61	5.0	50.00		101	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202589

Sample ID: **1501N94-006AMS** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6045218**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	42.76	5.0	50.00		85.5	70.5	137				
Trichloroethene	47.85	5.0	50.00		95.7	71.8	139				
Surr: 4-Bromofluorobenzene	45.75	0	50.00		91.5	70.6	123				
Surr: Dibromofluoromethane	50.67	0	50.00		101	78.7	124				
Surr: Toluene-d8	49.20	0	50.00		98.4	81.3	120				

Sample ID: **1501N94-007AMS** Client ID: **MW-401SAP-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **285757**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/13/2015** Seq No: **6064112**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.28	5.0	50.00		94.6	70	135				H
Toluene	48.08	5.0	50.00		96.2	70.5	137				H
Trichloroethene	68.56	5.0	50.00	18.94	99.2	71.8	139				H
Surr: 4-Bromofluorobenzene	47.92	0	50.00		95.8	70.6	123				H
Surr: Dibromofluoromethane	51.50	0	50.00		103	78.7	124				H
Surr: Toluene-d8	48.13	0	50.00		96.3	81.3	120				H

Sample ID: **1501N94-008AMS** Client ID: **MW-309BR-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6046504**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.87	5.0	50.00		99.7	70	135				
Toluene	49.07	5.0	50.00		98.1	70.5	137				
Trichloroethene	47.87	5.0	50.00		95.7	71.8	139				
Surr: 4-Bromofluorobenzene	46.78	0	50.00		93.6	70.6	123				
Surr: Dibromofluoromethane	48.75	0	50.00		97.5	78.7	124				
Surr: Toluene-d8	47.83	0	50.00		95.7	81.3	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202589

Sample ID: **1501N94-006AMSD** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6045219**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.95	5.0	50.00		95.9	70	135	50.61	5.40	20	
Toluene	47.29	5.0	50.00		94.6	70.5	137	42.76	10.1	20	
Trichloroethene	45.88	5.0	50.00		91.8	71.8	139	47.85	4.20	20	
Surr: 4-Bromofluorobenzene	46.63	0	50.00		93.3	70.6	123	45.75	0	0	
Surr: Dibromofluoromethane	48.83	0	50.00		97.7	78.7	124	50.67	0	0	
Surr: Toluene-d8	48.27	0	50.00		96.5	81.3	120	49.20	0	0	

Sample ID: **1501N94-007AMSD** Client ID: **MW-401SAP-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **285757**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/13/2015** Seq No: **6064232**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.71	5.0	50.00		93.4	70	135	47.28	1.21	20	H
Toluene	48.47	5.0	50.00		96.9	70.5	137	48.08	0.808	20	H
Trichloroethene	67.87	5.0	50.00	18.94	97.9	71.8	139	68.56	1.01	20	H
Surr: 4-Bromofluorobenzene	49.02	0	50.00		98.0	70.6	123	47.92	0	0	H
Surr: Dibromofluoromethane	52.22	0	50.00		104	78.7	124	51.50	0	0	H
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120	48.13	0	0	H

Sample ID: **1501N94-008AMSD** Client ID: **MW-309BR-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6046505**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.30	5.0	50.00		98.6	70	135	49.87	1.15	20	
Toluene	49.55	5.0	50.00		99.1	70.5	137	49.07	0.973	20	
Trichloroethene	47.59	5.0	50.00		95.2	71.8	139	47.87	0.587	20	
Surr: 4-Bromofluorobenzene	47.28	0	50.00		94.6	70.6	123	46.78	0	0	
Surr: Dibromofluoromethane	49.47	0	50.00		98.9	78.7	124	48.75	0	0	
Surr: Toluene-d8	48.65	0	50.00		97.3	81.3	120	47.83	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202639

Sample ID: **MB-202639**	Client ID:			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-202639**	Client ID:			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050627**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004928	0.00020	0.0050		98.6	80	120				

Sample ID: **1501N94-006CMS**	Client ID: **MW-207-20150129-01**			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050629**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004728	0.00020	0.0050		94.6	70	130				

Sample ID: **1501N94-007DMS**	Client ID: **MW-401SAP-20150129-01**			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050633**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005186	0.00020	0.0050	0.0003808	96.1	70	130				

Sample ID: **1501N94-008DMS**	Client ID: **MW-309BR-20150129-01**			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004798	0.00020	0.0050		96.0	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202639

Sample ID: **1501P17-023AMS**	Client ID:				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050641**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.004009	0.00020	0.0050	0.0001547	77.1	70	130			

Sample ID: **1501N94-006CMSD**	Client ID: **MW-207-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050630**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.004855	0.00020	0.0050		97.1	70	130	0.004728	2.66	20

Sample ID: **1501N94-007DMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050636**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.005025	0.00020	0.0050	0.0003808	92.9	70	130	0.005186	3.17	20

Sample ID: **1501N94-008DMSD**	Client ID: **MW-309BR-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050639**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.005018	0.00020	0.0050		100	70	130	0.004798	4.49	20

Sample ID: **1501P17-023AMSD**	Client ID:				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050642**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.004062	0.00020	0.0050	0.0001547	78.1	70	130	0.004009	1.30	20

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **MB-202663**	Client ID:		Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MBLK**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D**		BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6050657**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.603	0	2.000		80.1	55.4	136				

Sample ID: **LCS-202663**	Client ID:		Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D**		BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6050659**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.722	0.50	2.000		86.1	66.3	118				
Acenaphthylene	1.744	1.0	2.000		87.2	64	120				
Anthracene	1.775	0.050	2.000		88.8	64.6	127				
Benz(a)anthracene	1.844	0.050	2.000		92.2	60.6	137				
Benzo(a)pyrene	1.676	0.050	2.000		83.8	64	124				
Benzo(b)fluoranthene	1.937	0.10	2.000		96.9	56.4	133				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **LCS-202663** Client ID: Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6050659**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.796	0.10	2.000		89.8	49.9	137				
Benzo(k)fluoranthene	1.796	0.050	2.000		89.8	61.7	137				
Chrysene	1.748	0.050	2.000		87.4	65.5	127				
Dibenz(a,h)anthracene	1.683	0.10	2.000		84.2	52.4	130				
Fluoranthene	1.755	0.10	2.000		87.8	67	131				
Fluorene	1.767	0.10	2.000		88.4	68.3	120				
Indeno(1,2,3-cd)pyrene	1.757	0.050	2.000		87.9	50.4	139				
Naphthalene	1.694	0.50	2.000		84.7	61.1	120				
Phenanthrene	1.744	0.050	2.000		87.2	68	119				
Pyrene	1.707	0.050	2.000		85.4	62	127				
Surr: 4-Terphenyl-d14	1.601	0	2.000		80.1	55.4	136				

Sample ID: **1501N94-006BMS** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6051679**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.557	0.50	2.000	0.05087	75.3	45.6	120				
Acenaphthylene	1.573	1.0	2.000	0.1776	69.8	48.3	124				
Anthracene	1.611	0.050	2.000	0.05080	78.0	57.7	124				
Benz(a)anthracene	1.784	0.050	2.000		89.2	50.3	143				
Benzo(a)pyrene	1.473	0.050	2.000		73.6	44.2	127				
Benzo(b)fluoranthene	1.828	0.10	2.000		91.4	48.4	125				
Benzo(g,h,i)perylene	1.440	0.10	2.000		72.0	40.2	122				
Benzo(k)fluoranthene	1.522	0.050	2.000		76.1	45.5	122				
Chrysene	1.488	0.050	2.000		74.4	46	124				
Dibenz(a,h)anthracene	1.208	0.10	2.000		60.4	40.1	128				
Fluoranthene	1.654	0.10	2.000	0.01574	81.9	58	127				
Fluorene	1.654	0.10	2.000	0.04070	80.6	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-006BMS**	Client ID: **MW-207-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051679**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.344	0.050	2.000		67.2	40.3	129				
Naphthalene	1.485	0.50	2.000	0.1958	64.4	46.6	120				
Phenanthrene	1.590	0.050	2.000	0.03482	77.7	50.6	122				
Pyrene	1.622	0.050	2.000	0.02173	80.0	50.1	128				
Surr: 4-Terphenyl-d14	1.489	0	2.000		74.4	55.4	136				

Sample ID: **1501N94-007CMS**	Client ID: **MW-401SAP-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051677**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.670	0.50	2.000	0.02650	82.2	45.6	120				
Acenaphthylene	1.684	1.0	2.000	0.05978	81.2	48.3	124				
Anthracene	1.737	0.050	2.000	0.02400	85.7	57.7	124				
Benz(a)anthracene	1.825	0.050	2.000		91.3	50.3	143				
Benzo(a)pyrene	1.600	0.050	2.000		80.0	44.2	127				
Benzo(b)fluoranthene	1.958	0.10	2.000		97.9	48.4	125				
Benzo(g,h,i)perylene	1.609	0.10	2.000		80.5	40.2	122				
Benzo(k)fluoranthene	1.735	0.050	2.000		86.8	45.5	122				
Chrysene	1.694	0.050	2.000		84.7	46	124				
Dibenz(a,h)anthracene	1.519	0.10	2.000		75.9	40.1	128				
Fluoranthene	1.754	0.10	2.000		87.7	58	127				
Fluorene	1.709	0.10	2.000		85.5	52.6	124				
Indeno(1,2,3-cd)pyrene	1.601	0.050	2.000		80.1	40.3	129				
Naphthalene	1.756	0.50	2.000	0.1006	82.8	46.6	120				
Phenanthrene	1.693	0.050	2.000	0.01905	83.7	50.6	122				
Pyrene	1.642	0.050	2.000	0.01586	81.3	50.1	128				
Surr: 4-Terphenyl-d14	1.564	0	2.000		78.2	55.4	136				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-008CMS**	Client ID: **MW-309BR-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051675**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.701	0.50	2.000		85.0	45.6	120				
Acenaphthylene	1.713	1.0	2.000	0.04630	83.3	48.3	124				
Anthracene	1.747	0.050	2.000	0.02119	86.3	57.7	124				
Benz(a)anthracene	1.834	0.050	2.000		91.7	50.3	143				
Benzo(a)pyrene	1.511	0.050	2.000		75.5	44.2	127				
Benzo(b)fluoranthene	1.829	0.10	2.000		91.4	48.4	125				
Benzo(g,h,i)perylene	1.474	0.10	2.000		73.7	40.2	122				
Benzo(k)fluoranthene	1.578	0.050	2.000		78.9	45.5	122				
Chrysene	1.680	0.050	2.000		84.0	46	124				
Dibenz(a,h)anthracene	1.364	0.10	2.000		68.2	40.1	128				
Fluoranthene	1.804	0.10	2.000	0.01499	89.4	58	127				
Fluorene	1.777	0.10	2.000		88.9	52.6	124				
Indeno(1,2,3-cd)pyrene	1.412	0.050	2.000		70.6	40.3	129				
Naphthalene	1.730	0.50	2.000	0.02188	85.4	46.6	120				
Phenanthrene	1.712	0.050	2.000	0.02030	84.6	50.6	122				
Pyrene	1.721	0.050	2.000	0.01923	85.1	50.1	128				
Surr: 4-Terphenyl-d14	1.563	0	2.000		78.2	55.4	136				

Sample ID: **1501N94-006BMSD**	Client ID: **MW-207-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.766	0.50	2.000	0.05087	85.8	45.6	120	1.557	12.6	29.4	
Acenaphthylene	1.745	1.0	2.000	0.1776	78.4	48.3	124	1.573	10.4	32.5	
Anthracene	1.779	0.050	2.000	0.05080	86.4	57.7	124	1.611	9.87	21.9	
Benz(a)anthracene	1.810	0.050	2.000		90.5	50.3	143	1.784	1.48	26.8	
Benzo(a)pyrene	1.508	0.050	2.000		75.4	44.2	127	1.473	2.38	40.9	
Benzo(b)fluoranthene	1.778	0.10	2.000		88.9	48.4	125	1.828	2.73	24.2	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-006BMSD** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6051680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.435	0.10	2.000		71.7	40.2	122	1.440	0.345	26.2	
Benzo(k)fluoranthene	1.610	0.050	2.000		80.5	45.5	122	1.522	5.64	23.3	
Chrysene	1.624	0.050	2.000		81.2	46	124	1.488	8.72	25	
Dibenz(a,h)anthracene	1.297	0.10	2.000		64.8	40.1	128	1.208	7.05	23.6	
Fluoranthene	1.788	0.10	2.000	0.01574	88.6	58	127	1.654	7.79	23.5	
Fluorene	1.817	0.10	2.000	0.04070	88.8	52.6	124	1.654	9.39	31.5	
Indeno(1,2,3-cd)pyrene	1.373	0.050	2.000		68.7	40.3	129	1.344	2.13	28.8	
Naphthalene	1.746	0.50	2.000	0.1958	77.5	46.6	120	1.485	16.2	22.9	
Phenanthrene	1.743	0.050	2.000	0.03482	85.4	50.6	122	1.590	9.18	20.2	
Pyrene	1.705	0.050	2.000	0.02173	84.2	50.1	128	1.622	4.99	24.7	
Surr: 4-Terphenyl-d14	1.548	0	2.000		77.4	55.4	136	1.489	0	0	

Sample ID: **1501N94-007CMSD** Client ID: **MW-401SAP-20150129-01** Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6051678**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.876	0.50	2.000	0.02650	92.5	45.6	120	1.670	11.6	29.4	
Acenaphthylene	1.748	1.0	2.000	0.05978	84.4	48.3	124	1.684	3.71	32.5	
Anthracene	1.807	0.050	2.000	0.02400	89.2	57.7	124	1.737	3.94	21.9	
Benz(a)anthracene	1.896	0.050	2.000		94.8	50.3	143	1.825	3.78	26.8	
Benzo(a)pyrene	1.657	0.050	2.000		82.8	44.2	127	1.600	3.50	40.9	
Benzo(b)fluoranthene	1.986	0.10	2.000		99.3	48.4	125	1.958	1.44	24.2	
Benzo(g,h,i)perylene	1.496	0.10	2.000		74.8	40.2	122	1.609	7.32	26.2	
Benzo(k)fluoranthene	1.797	0.050	2.000		89.9	45.5	122	1.735	3.51	23.3	
Chrysene	1.701	0.050	2.000		85.0	46	124	1.694	0.383	25	
Dibenz(a,h)anthracene	1.325	0.10	2.000		66.3	40.1	128	1.519	13.6	23.6	
Fluoranthene	1.830	0.10	2.000		91.5	58	127	1.754	4.27	23.5	
Fluorene	1.809	0.10	2.000		90.4	52.6	124	1.709	5.66	31.5	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-007CMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **ug/L**		Prep Date: **02/05/2015**		Run No: **285236**	
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**				BatchID: **202663**		Analysis Date: **02/05/2015**		Seq No: **6051678**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Indeno(1,2,3-cd)pyrene	1.514	0.050	2.000		75.7	40.3	129	1.601	5.62	28.8
Naphthalene	1.797	0.50	2.000	0.1006	84.8	46.6	120	1.756	2.30	22.9
Phenanthrene	1.763	0.050	2.000	0.01905	87.2	50.6	122	1.693	4.06	20.2
Pyrene	1.770	0.050	2.000	0.01586	87.7	50.1	128	1.642	7.46	24.7
Surr: 4-Terphenyl-d14	1.605	0	2.000		80.2	55.4	136	1.564	0	0

Sample ID: **1501N94-008CMSD**	Client ID: **MW-309BR-20150129-01**				Units: **ug/L**		Prep Date: **02/05/2015**		Run No: **285236**	
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**				BatchID: **202663**		Analysis Date: **02/05/2015**		Seq No: **6051676**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Acenaphthene	1.761	0.50	2.000		88.1	45.6	120	1.701	3.49	29.4
Acenaphthylene	1.807	1.0	2.000	0.04630	88.0	48.3	124	1.713	5.35	32.5
Anthracene	1.715	0.050	2.000	0.02119	84.7	57.7	124	1.747	1.87	21.9
Benz(a)anthracene	1.883	0.050	2.000		94.2	50.3	143	1.834	2.67	26.8
Benzo(a)pyrene	1.532	0.050	2.000		76.6	44.2	127	1.511	1.36	40.9
Benzo(b)fluoranthene	1.883	0.10	2.000		94.1	48.4	125	1.829	2.91	24.2
Benzo(g,h,i)perylene	1.506	0.10	2.000		75.3	40.2	122	1.474	2.08	26.2
Benzo(k)fluoranthene	1.526	0.050	2.000		76.3	45.5	122	1.578	3.31	23.3
Chrysene	1.588	0.050	2.000		79.4	46	124	1.680	5.60	25
Dibenz(a,h)anthracene	1.179	0.10	2.000		58.9	40.1	128	1.364	14.5	23.6
Fluoranthene	1.762	0.10	2.000	0.01499	87.4	58	127	1.804	2.31	23.5
Fluorene	1.842	0.10	2.000		92.1	52.6	124	1.777	3.55	31.5
Indeno(1,2,3-cd)pyrene	1.373	0.050	2.000		68.6	40.3	129	1.412	2.82	28.8
Naphthalene	1.752	0.50	2.000	0.02188	86.5	46.6	120	1.730	1.28	22.9
Phenanthrene	1.723	0.050	2.000	0.02030	85.2	50.6	122	1.712	0.684	20.2
Pyrene	1.786	0.050	2.000	0.01923	88.3	50.1	128	1.721	3.67	24.7
Surr: 4-Terphenyl-d14	1.587	0	2.000		79.3	55.4	136	1.563	0	0

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202688

Sample ID: **MB-202688**	Client ID:				Units: **mg/L**		Prep Date: **02/03/2015**		Run No: **285156**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/03/2015**		Seq No: **6048353**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202688**	Client ID:				Units: **mg/L**		Prep Date: **02/03/2015**		Run No: **285156**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/03/2015**		Seq No: **6048354**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2686	0.010	0.2500		107	90	110				

Sample ID: **1501M91-003AMS**	Client ID:				Units: **mg/L**		Prep Date: **02/03/2015**		Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/03/2015**		Seq No: **6048363**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2647	0.010	0.2500	0.003900	104	90	110				

Sample ID: **1501N94-006DMS**	Client ID: **MW-207-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/04/2015**		Seq No: **6048376**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2270	0.010	0.2500	0.006600	88.2	90	110				S

Sample ID: **1501N94-007EMS**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/13/2015**		Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/13/2015**		Seq No: **6072584**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1328	0.010	0.2500	0.006000	50.7	90	110				SH

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202688

Sample ID: **1501N94-008EMS**	Client ID: **MW-309BR-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1652	0.010	0.2500	0.006600	63.4	90	110				SH

Sample ID: **1501M91-003AMSD**	Client ID:	Units: **mg/L**	Prep Date: **02/03/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/03/2015**	Seq No: **6048364**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2656	0.010	0.2500	0.003900	105	90	110	0.2647	0.339	20	

Sample ID: **1501N94-006DMSD**	Client ID: **MW-207-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072583**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2069	0.010	0.2500	0.006600	80.1	90	110	0.2270	9.26	20	SH

Sample ID: **1501N94-007EMSD**	Client ID: **MW-401SAP-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072585**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1331	0.010	0.2500	0.006000	50.8	90	110	0.1328	0.226	20	SH

Sample ID: **1501N94-008EMSD**	Client ID: **MW-309BR-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1655	0.010	0.2500	0.006600	63.6	90	110	0.1652	0.181	20	SH

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 203295

Sample ID: **MB-203295**	Client ID:				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069964**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-203295**	Client ID:				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069965**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004771	0.00020	0.0050		95.4	80	120				

Sample ID: **1501N94-007DMS**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069967**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005015	0.00020	0.0050	0.0003591	93.1	70	130				

Sample ID: **1501N94-007DMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069968**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004897	0.00020	0.0050	0.0003591	90.8	70	130	0.005015	2.38	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R284868

Sample ID: **MB-R284868**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MBLK**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041257**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R284868**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **LCS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5215	0.100	0.5000		104	85	115				

Sample ID: **1501N94-007FMS**	Client ID: **MW-401SAP-20150129-01**			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041293**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5215	0.100	0.5000		104	80	120				

Sample ID: **1501N94-008FMS**	Client ID: **MW-309BR-20150129-01**			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041262**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.6172	0.100	0.5000	0.1193	99.6	80	120				

Sample ID: **1501N94-007FMSD**	Client ID: **MW-401SAP-20150129-01**			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MSD**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041299**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5215	0.100	0.5000		104	80	120	0.5215	0	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R284868

Sample ID: **1501N94-008FMSD** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: Run No: **284868**
SampleType: **MSD** TestCode: **Ferrous Iron SM3500-Fe-B** BatchID: **R284868** Analysis Date: **01/30/2015** Seq No: **6041272**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.6090	0.100	0.5000	0.1193	97.9	80	120	0.6172	1.34	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285013

Sample ID: **1501N94-007GDUP**	Client ID: **MW-401SAP-20150129-01**					Units: **mg/L**		Prep Date:		Run No: **285013**	
SampleType: **DUP**	TestCode: **CARBON DIOXIDE**	**SM4500-CO2**				BatchID: **R285013**		Analysis Date: **02/03/2015**		Seq No: **6045121**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Total Carbon Dioxide	70.60	10.0						0	0	20	

Sample ID: **1501N94-008GDUP**	Client ID: **MW-309BR-20150129-01**					Units: **mg/L**		Prep Date:		Run No: **285013**	
SampleType: **DUP**	TestCode: **CARBON DIOXIDE**	**SM4500-CO2**				BatchID: **R285013**		Analysis Date: **02/03/2015**		Seq No: **6045122**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Total Carbon Dioxide	44.53	10.0						0	0	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285097

Sample ID: **MB-R285097**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047017**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R285097**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047016**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.087	0.25	5.000		102	90	110				
Sulfate	26.84	1.0	25.00		107	90	110				

Sample ID: **1501N94-007GMS**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047023**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	8.059	0.25	5.000	2.589	109	90	110				
Sulfate	67.94	1.0	25.00	42.72	101	90	110				

Sample ID: **1501N94-008GMS**	Client ID: **MW-309BR-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047025**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.273	0.25	5.000		85.5	90	110				S
Sulfate	22.15	1.0	25.00	0.6368	86.1	90	110				S

Sample ID: **1501N94-007GMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047024**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	7.378	0.25	5.000	2.589	95.8	90	110	8.059	8.82	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285097

Sample ID: **1501N94-007GMSD**	Client ID: **MW-401SAP-20150129-01**	Units: **mg/L**	Prep Date:	Run No: **285097**
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**	BatchID: **R285097**	Analysis Date: **01/30/2015**	Seq No: **6047024**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	64.38	1.0	25.00	42.72	86.7	90	110	67.94	5.37	20	S

Sample ID: **1501N94-008GMSD**	Client ID: **MW-309BR-20150129-01**	Units: **mg/L**	Prep Date:	Run No: **285097**
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**	BatchID: **R285097**	Analysis Date: **02/13/2015**	Seq No: **6064515**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.153	0.25	5.000		103	90	110	4.273	18.7	20	H
Sulfate	25.00	1.0	25.00	0.6368	97.5	90	110	22.15	12.1	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285387

Sample ID: **MB-R285387**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **285387**	
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R285387**		Analysis Date: **02/09/2015**		Seq No: **6054373**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501N94-003GDUP**	Client ID: **DUP-06-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285387**	
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R285387**		Analysis Date: **02/09/2015**		Seq No: **6054382**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	8.440	1.00		8.450				0	0	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 10, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1409143

Analytical Environmental Services, Inc. received 3 samples on 9/3/2014 12:33:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1409143

Date: 9/3/14 Page 1 of 1

COMPANY: ERM

ADDRESS: 3200 Windy Hill Road SE Suite 1500W Atlanta, GA 30339

PHONE: 678-486-2700

FAX:

SAMPLED BY: Charlie Brooks & Austin Kelly

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	BTEX by 624 Wastewater	Barium	pH	Sb, Cr, Cu, Ni, Hexavalent Cr										REMARKS	No # of Containers
	PRESERVATION (See codes)						HCL	N		N											
1	Trip Blank	9/3/14	—			W	X														2
2	Effluent Grab	9/3/14	900	X		GW	X	X	X												4
3	Effluent Composite	9/3/14	900		X	GW				X	X										2
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					

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

RELINQUISHED BY / DATE/TIME
1: Austin Kelly 9/3/14 12:33pm
2:
3:

RECEIVED BY / DATE/TIME
1: Cataya Reeves 9/3/14 12:33
2:
3:

PROJECT INFORMATION
PROJECT NAME: AGLC Augusta Effluent
PROJECT #: 0230712
SITE ADDRESS: Augusta, GA
SEND REPORT TO: greg.jirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 8

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

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

SPECIAL INSTRUCTIONS/COMMENTS:

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

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

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 10-Sep-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1409143

Case Narrative

Sample Receiving Nonconformance:

Sample 1409143-002C for pH analysis by Method SM4500 H+ B was received and analyzed outside of the method specified holding time of immediate or 15 minutes.

Analytical Environmental Services, Inc **Date:** 10-Sep-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIPBLANK
Project Name:	AGLC Augusta Effluent	**Collection Date:**	9/3/2014
Lab ID:	1409143-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
Ethylbenzene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
m,p-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
o-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
Toluene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
Surr: 4-Bromofluorobenzene	93.4	66.2-120		%REC	195849	1	09/05/2014 15:24	NH
Surr: Dibromofluoromethane	83.2	79.5-121		%REC	195849	1	09/05/2014 15:24	NH
Surr: Toluene-d8	91.1	77-117		%REC	195849	1	09/05/2014 15:24	NH

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 10-Sep-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	9/3/2014 9:00:00 AM
Lab ID:	1409143-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.643	0.0100		mg/L	195753	1	09/04/2014 23:45	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	64	5.0		ug/L	195849	1	09/05/2014 21:26	NH
Ethylbenzene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
m,p-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
o-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
Toluene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
Surr: 4-Bromofluorobenzene	93	66.2-120		%REC	195849	1	09/05/2014 21:26	NH
Surr: Dibromofluoromethane	81.5	79.5-121		%REC	195849	1	09/05/2014 21:26	NH
Surr: Toluene-d8	92.4	77-117		%REC	195849	1	09/05/2014 21:26	NH
Hydrogen Ion (pH) by SM4500 H+ B								
pH	6.74	0.0100	H	pH Units	R274959	1	09/03/2014 16:20	OM

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 10-Sep-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	9/3/2014 9:00:00 AM
Lab ID:	1409143-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	195753	1	09/04/2014 17:22	JL
Chromium	BRL	0.0100		mg/L	195753	1	09/04/2014 17:22	JL
Copper	BRL	0.0250		mg/L	195753	1	09/04/2014 17:22	JL
Nickel	BRL	0.0200		mg/L	195753	1	09/04/2014 17:22	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R274960	1	09/03/2014 13:45	AB

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1409143

Checklist completed by [signature] 9/3/14
Signature Date

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

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

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

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

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

Cooler #1 3.6°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by BM

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Analytical Environmental Services, Inc

Date: 10-Sep-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab Order: 1409143

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1409143-001A	TRIPBLANK	9/3/2014 12:00:00AM	Aqueous	PP-VOLATILES		09/05/2014	09/05/2014
1409143-002A	EFFLUENT GRAB	9/3/2014 9:00:00AM	Groundwater	PP-VOLATILES		09/05/2014	09/05/2014
1409143-002B	EFFLUENT GRAB	9/3/2014 9:00:00AM	Groundwater	Total Metals by ICP		09/04/2014	09/04/2014
1409143-002C	EFFLUENT GRAB	9/3/2014 9:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			09/03/2014
1409143-003A	EFFLUENT COMPOSITE	9/3/2014 9:00:00AM	Groundwater	Total Metals by ICP		09/04/2014	09/04/2014
1409143-003B	EFFLUENT COMPOSITE	9/3/2014 9:00:00AM	Groundwater	Hexavalent Chromium			09/03/2014

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195753

Sample ID: **MB-195753** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805491**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-195753** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805495**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.088	0.0600	1.000	0.004453	108	85	115				
Barium	1.066	0.0100	1.000		107	85	115				
Chromium	1.052	0.0100	1.000		105	85	115				
Copper	1.053	0.0250	1.000		105	85	115				
Nickel	1.057	0.0200	1.000		106	85	115				

Sample ID: **1409078-001AMS** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805497**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.077	0.0600	1.000	0.01314	106	70	130				
Barium	1.065	0.0100	1.000	0.01518	105	70	130				
Chromium	1.034	0.0100	1.000		103	70	130				
Copper	1.034	0.0250	1.000	0.0006094	103	70	130				
Nickel	1.029	0.0200	1.000		103	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195753

Sample ID: **1409143-003AMS** Client ID: **EFFLUENT COMPOSITE** Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805504**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.082	0.0600	1.000	0.005747	108	70	130				
Barium	1.659	0.0100	1.000	0.6510	101	70	130				
Chromium	1.032	0.0100	1.000		103	70	130				
Copper	1.031	0.0250	1.000		103	70	130				
Nickel	0.9949	0.0200	1.000		99.5	70	130				

Sample ID: **1409078-001AMSD** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805499**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.090	0.0600	1.000	0.01314	108	70	130	1.077	1.17	20	
Barium	1.064	0.0100	1.000	0.01518	105	70	130	1.065	0.110	20	
Chromium	1.034	0.0100	1.000		103	70	130	1.034	0.024	20	
Copper	1.036	0.0250	1.000	0.0006094	104	70	130	1.034	0.186	20	
Nickel	1.029	0.0200	1.000		103	70	130	1.029	0.016	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195849

Sample ID: **MB-195849** Client ID: Units: **ug/L** Prep Date: **09/05/2014** Run No: **275121**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **195849** Analysis Date: **09/05/2014** Seq No: **5807796**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.00									
Ethylbenzene	BRL	5.00									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	46.63	0	50.00		93.3	66.2	120				
Surr: Dibromofluoromethane	41.72	0	50.00		83.4	79.5	121				
Surr: Toluene-d8	45.27	0	50.00		90.5	77	117				

Sample ID: **LCS-195849** Client ID: Units: **ug/L** Prep Date: **09/05/2014** Run No: **275121**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **195849** Analysis Date: **09/05/2014** Seq No: **5807795**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.72	5.00	20.00		93.6	64	136				
Ethylbenzene	21.71	5.00	20.00		109	59	141				
m,p-Xylene	45.64	5.00	40.00		114	62.5	126				
o-Xylene	22.89	5.00	20.00		114	63.4	121				
Toluene	19.21	5.00	20.00		96.0	75	126				
Surr: 4-Bromofluorobenzene	48.67	0	50.00		97.3	66.2	120				
Surr: Dibromofluoromethane	43.23	0	50.00		86.5	79.5	121				
Surr: Toluene-d8	46.17	0	50.00		92.3	77	117				

Sample ID: **1408N85-004AMS** Client ID: Units: **ug/L** Prep Date: **09/05/2014** Run No: **275121**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **195849** Analysis Date: **09/05/2014** Seq No: **5807798**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.79	5.0	20.00		89.0	37	151				
Ethylbenzene	19.89	5.0	20.00		99.4	37	162				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195849

Sample ID: **1408N85-004AMS**	Client ID:			Units: **ug/L**		Prep Date: **09/05/2014**		Run No: **275121**	
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES E624**			BatchID: **195849**		Analysis Date: **09/05/2014**		Seq No: **5807798**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	41.83	5.0	40.00		105	71.5	145				
o-Xylene	21.19	5.0	20.00		106	72	140				
Toluene	17.77	5.0	20.00		88.8	47	150				
Surr: 4-Bromofluorobenzene	49.77	0	50.00		99.5	66.2	120				
Surr: Dibromofluoromethane	43.91	0	50.00		87.8	79.5	121				
Surr: Toluene-d8	45.36	0	50.00		90.7	77	117				

Sample ID: **1408N85-004AMSD**	Client ID:			Units: **ug/L**		Prep Date: **09/05/2014**		Run No: **275121**	
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES E624**			BatchID: **195849**		Analysis Date: **09/05/2014**		Seq No: **5807799**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.18	5.0	20.00		85.9	37	151	17.79	3.49	34.5	
Ethylbenzene	19.22	5.0	20.00		96.1	37	162	19.89	3.43	37.5	
m,p-Xylene	41.05	5.0	40.00		103	71.5	145	41.83	1.88	20.1	
o-Xylene	20.86	5.0	20.00		104	72	140	21.19	1.57	19.1	
Toluene	17.50	5.0	20.00		87.5	47	150	17.77	1.53	24	
Surr: 4-Bromofluorobenzene	48.78	0	50.00		97.6	66.2	120	49.77	0	0	
Surr: Dibromofluoromethane	44.17	0	50.00		88.3	79.5	121	43.91	0	0	
Surr: Toluene-d8	46.30	0	50.00		92.6	77	117	45.36	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: R274959

Sample ID: **LCS-R274959**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **274959**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R274959**		Analysis Date: **09/03/2014**		Seq No: **5803455**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.050	0.0100	7.000		101	90	110				

Sample ID: **1408N92-001BDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **274959**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R274959**		Analysis Date: **09/03/2014**		Seq No: **5803465**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.270	0.0100						7.260	0.138	20	H

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: R274960

Sample ID: **MB-R274960**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803469**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R274960**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803470**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4837	0.010	0.5000		96.7	90	110				

Sample ID: **1409143-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803476**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4854	0.010	0.5000		97.1	85	115				

Sample ID: **1409143-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4941	0.010	0.5000		98.8	85	115	0.4854	1.78	30	

Qualifiers:

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

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

October 20, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1410982

Analytical Environmental Services, Inc. received 3 samples on 10/10/2014 11:05:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1410982

Date: 10/10/14 Page 1 of 1

COMPANY: ERM

ADDRESS: 3200 Windy Hill Rd Suite 1500W Atlanta GA 30339

PHONE: 678-486-2700 FAX:

SAMPLED BY: Kevin Speracek + Austin Kelly SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	BTEX by 624	Barium	pH	Sb, Cr, Cu, Ni	Hexavalent Cr												No # of Containers
	PRESERVATION (See codes)						HCl	N		N													
1	Trip Blank	10/10/14	—			W	X																2
2	Effluent Grab	10/10/14	900	X		GW	X	X	X														4
3	Effluent Composite	10/10/14	900		X	GW				X	X												2
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

ANALYSIS REQUESTED

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

REMARKS

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	10/10/14 11:05	1: Catarina Reuco	10/10/14 11:05
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGLC Augusta Effluent

PROJECT #: 0230712

SITE ADDRESS: Augusta GA

SEND REPORT TO: greg.jurak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 8

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

STATE PROGRAM (if any):

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

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER GREYHOUND OTHER

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

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 21-Oct-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1410982

Case Narrative

Sample Receiving Nonconformance:

Sample for pH analysis by Method SM4500 H+ B were received and analyzed outside Method specified holding time of immediate or 15 minutes.

Analytical Environmental Services, Inc **Date:** 20-Oct-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIPBLANK
Project Name:	AGLC Augusta Effluent	**Collection Date:**	10/10/2014
Lab ID:	1410982-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
Ethylbenzene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
m,p-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
o-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
Toluene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
Surr: 4-Bromofluorobenzene	85.6	66.2-120		%REC	197655	1	10/14/2014 03:23	AR
Surr: Dibromofluoromethane	106	79.5-121		%REC	197655	1	10/14/2014 03:23	AR
Surr: Toluene-d8	95.2	77-117		%REC	197655	1	10/14/2014 03:23	AR

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 20-Oct-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	10/10/2014 9:00:00 AM
Lab ID:	1410982-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.306	0.0100		mg/L	197807	1	10/17/2014 16:10	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
Ethylbenzene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
m,p-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
o-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
Toluene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
Surr: 4-Bromofluorobenzene	98.7	66.2-120		%REC	197655	1	10/14/2014 23:39	AR
Surr: Dibromofluoromethane	93.8	79.5-121		%REC	197655	1	10/14/2014 23:39	AR
Surr: Toluene-d8	92.2	77-117		%REC	197655	1	10/14/2014 23:39	AR
Hydrogen Ion (pH) by SM4500 H+ B								
pH	8.60	0.0100	H	pH Units	R277903	1	10/15/2014 12:10	OM

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 20-Oct-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	10/10/2014 9:00:00 AM
Lab ID:	1410982-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	197807	1	10/17/2014 16:13	JL
Chromium	BRL	0.0100		mg/L	197807	1	10/17/2014 16:13	JL
Copper	BRL	0.0250		mg/L	197807	1	10/17/2014 16:13	JL
Nickel	BRL	0.0200		mg/L	197807	1	10/17/2014 16:13	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R277699	1	10/10/2014 16:05	AB

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1410982

Checklist completed by [signature] 10/10/14
Signature Date

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

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

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

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

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

Cooler #1 3.6°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by BM

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Analytical Environmental Services, Inc

Date: 21-Oct-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab Order: 1410982

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1410982-001A	TRIPBLANK	10/10/2014 12:00:00AM	Aqueous	PP-VOLATILES		10/13/2014	10/14/2014
1410982-002A	EFFLUENT GRAB	10/10/2014 9:00:00AM	Groundwater	PP-VOLATILES		10/13/2014	10/14/2014
1410982-002B	EFFLUENT GRAB	10/10/2014 9:00:00AM	Groundwater	Total Metals by ICP		10/17/2014	10/17/2014
1410982-002C	EFFLUENT GRAB	10/10/2014 9:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			10/15/2014
1410982-003A	EFFLUENT COMPOSITE	10/10/2014 9:00:00AM	Groundwater	Total Metals by ICP		10/17/2014	10/17/2014
1410982-003B	EFFLUENT COMPOSITE	10/10/2014 9:00:00AM	Groundwater	Hexavalent Chromium			10/10/2014

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197655

Sample ID: **MB-197655** Client ID: Units: **ug/L** Prep Date: **10/13/2014** Run No: **277757**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **197655** Analysis Date: **10/13/2014** Seq No: **5871605**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	39.55	0	50.00		79.1	66.2	120				
Surr: Dibromofluoromethane	55.75	0	50.00		112	79.5	121				
Surr: Toluene-d8	49.37	0	50.00		98.7	77	117				

Sample ID: **LCS-197655** Client ID: Units: **ug/L** Prep Date: **10/13/2014** Run No: **277757**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **197655** Analysis Date: **10/14/2014** Seq No: **5871606**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	23.16	5.0	20.00		116	64	136				
Ethylbenzene	20.38	5.0	20.00		102	59	141				
m,p-Xylene	43.55	5.0	40.00		109	62.5	126				
o-Xylene	20.63	5.0	20.00		103	63.4	121				
Toluene	22.32	5.0	20.00		112	75	126				
Surr: 4-Bromofluorobenzene	48.83	0	50.00		97.7	66.2	120				
Surr: Dibromofluoromethane	52.38	0	50.00		105	79.5	121				
Surr: Toluene-d8	51.09	0	50.00		102	77	117				

Sample ID: **1410A52-001AMS** Client ID: Units: **ug/L** Prep Date: **10/13/2014** Run No: **277757**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **197655** Analysis Date: **10/14/2014** Seq No: **5871612**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	30.61	5.0	20.00	6.540	120	37	151				
Ethylbenzene	24.22	5.0	20.00		121	37	162				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197655

Sample ID: **1410A52-001AMS**	Client ID:			Units: **ug/L**	Prep Date: **10/13/2014**	Run No: **277757**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **197655**	Analysis Date: **10/14/2014**	Seq No: **5871612**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	50.73	5.0	40.00	2.690	120	71.5	145				
o-Xylene	25.46	5.0	20.00		127	72	140				
Toluene	30.25	5.0	20.00	6.530	119	47	150				
Surr: 4-Bromofluorobenzene	47.28	0	50.00		94.6	66.2	120				
Surr: Dibromofluoromethane	48.09	0	50.00		96.2	79.5	121				
Surr: Toluene-d8	48.95	0	50.00		97.9	77	117				

Sample ID: **1410A52-001AMSD**	Client ID:			Units: **ug/L**	Prep Date: **10/13/2014**	Run No: **277757**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **197655**	Analysis Date: **10/14/2014**	Seq No: **5871613**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	29.70	5.0	20.00	6.540	116	37	151	30.61	3.02	34.5	
Ethylbenzene	23.96	5.0	20.00		120	37	162	24.22	1.08	37.5	
m,p-Xylene	50.65	5.0	40.00	2.690	120	71.5	145	50.73	0.158	20.1	
o-Xylene	25.09	5.0	20.00		125	72	140	25.46	1.46	19.1	
Toluene	28.42	5.0	20.00	6.530	109	47	150	30.25	6.24	24	
Surr: 4-Bromofluorobenzene	48.48	0	50.00		97.0	66.2	120	47.28	0	0	
Surr: Dibromofluoromethane	46.95	0	50.00		93.9	79.5	121	48.09	0	0	
Surr: Toluene-d8	47.36	0	50.00		94.7	77	117	48.95	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197807

Sample ID: **MB-197807** Client ID: Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
SampleType: **MBLK** TestCode: **Total Metals by ICP** **E200.7** BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876623**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-197807** Client ID: Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
SampleType: **LCS** TestCode: **Total Metals by ICP** **E200.7** BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876624**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9719	0.0600	1.000		97.2	85	115				
Barium	0.9752	0.0100	1.000		97.5	85	115				
Chromium	0.9713	0.0100	1.000		97.1	85	115				
Copper	0.9873	0.0250	1.000	0.001629	98.6	85	115				
Nickel	0.9747	0.0200	1.000		97.5	85	115				

Sample ID: **1410D47-001FMS** Client ID: Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
SampleType: **MS** TestCode: **Total Metals by ICP** **E200.7** BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5877081**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9519	0.0600	1.000		95.2	70	130				
Barium	1.002	0.0100	1.000	0.03906	96.3	70	130				
Chromium	0.9689	0.0100	1.000	0.003444	96.5	70	130				
Copper	0.9798	0.0250	1.000	0.01113	96.9	70	130				
Nickel	0.9800	0.0200	1.000	0.001876	97.8	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197807

Sample ID: **1410E99-001BMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9546	0.0600	1.000	0.003082	95.2	70	130				
Barium	0.9399	0.0100	1.000	0.02951	91.0	70	130				
Chromium	0.9306	0.0100	1.000	0.003333	92.7	70	130				
Copper	0.9353	0.0250	1.000	0.01392	92.1	70	130				
Nickel	0.9212	0.0200	1.000		92.1	70	130				

Sample ID: **1410E99-001BMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876628**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9154	0.0600	1.000	0.003082	91.2	70	130	0.9546	4.20	20	
Barium	0.9032	0.0100	1.000	0.02951	87.4	70	130	0.9399	3.98	20	
Chromium	0.8928	0.0100	1.000	0.003333	88.9	70	130	0.9306	4.15	20	
Copper	0.9012	0.0250	1.000	0.01392	88.7	70	130	0.9353	3.72	20	
Nickel	0.9005	0.0200	1.000		90.0	70	130	0.9212	2.28	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: R277699

Sample ID: **MB-R277699**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868069**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R277699**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868070**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5004	0.010	0.5000		100	90	110				

Sample ID: **1410982-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868073**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4958	0.010	0.5000		99.2	85	115				

Sample ID: **1410982-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4883	0.010	0.5000		97.7	85	115	0.4958	1.52	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: R277903

Sample ID: **LCS-R277903**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **277903**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R277903**		Analysis Date: **10/15/2014**		Seq No: **5872756**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.030	0.0100	7.000		100	90	110				

Sample ID: **1410904-001BDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **277903**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R277903**		Analysis Date: **10/15/2014**		Seq No: **5872772**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.570	0.0100						7.560	0.132	20	H

Sample ID: **1410A37-001CDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **277903**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R277903**		Analysis Date: **10/15/2014**		Seq No: **5872774**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	11.10	0.0100						11.08	0.180	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 14, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGL Augusta

Dear Greg Jirak: Order No: 1411157

Analytical Environmental Services, Inc. received 3 samples on 11/4/2014 1:30:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

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

CHAIN OF CUSTODY

Work Order: 1411157

Date: 11/4/14 Page 1 of 1

COMPANY: ERM	ADDRESS: 3200 Windy Hill Rd. SE ste 1500W Atlanta, GA 30339
PHONE:	FAX:
SAMPLED BY: Charlie Brooks and Barrett Fisher	SIGNATURE: Barrett Fisher

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Volatiles 624s	Bis(2-ethylhexyl) phthalate	Barium	pH	Hexavalent Cr	Sb, Cr, Cu, Ni	No # of Containers	REMARKS
				PRESERVATION (See codes)										
1	Trip Blank	11/4/14	—	X		W	X						2	
2	Effluent Grab	↓	1000	X		GW	X	X	X	X			6	
3	Effluent Composite	↓	1000		X	GW					X	X	2	
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Barrett Fisher	11/4/14 1330	1: [signature]	11/4/14 13.30
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGL Augusta
PROJECT #: 0230712
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg Jirak
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers:

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

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

SPECIAL INSTRUCTIONS/COMMENTS:

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

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 14-Nov-14

Client: ERM-Southeast
Project: AGL Augusta
Lab ID: 1411157

Case Narrative

Sample Receiving Nonconformance:

Sample 1411157-002B for pH analysis by Method SM4500 H+ B was received and analyzed outside of the method specified holding time of “immediate or 15 minutes”.

Analytical Environmental Services, Inc **Date:** 14-Nov-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIP BLANK
Project Name:	AGL Augusta	**Collection Date:**	11/4/2014
Lab ID:	1411157-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
Ethylbenzene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
m,p-Xylene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
o-Xylene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
Toluene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
Surr: 4-Bromofluorobenzene	81.5	70.6-123		%REC	198763	1	11/06/2014 04:59	AR
Surr: Dibromofluoromethane	102	78.7-124		%REC	198763	1	11/06/2014 04:59	AR
Surr: Toluene-d8	96.7	81.3-120		%REC	198763	1	11/06/2014 04:59	AR

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 14-Nov-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGL Augusta	**Collection Date:**	11/4/2014 10:00:00 AM
Lab ID:	1411157-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.603	0.0100		mg/L	198716	1	11/05/2014 20:11	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
Ethylbenzene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
m,p-Xylene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
o-Xylene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
Toluene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
Surr: 4-Bromofluorobenzene	82.3	70.6-123		%REC	198763	1	11/05/2014 20:09	AR
Surr: Dibromofluoromethane	99.8	78.7-124		%REC	198763	1	11/05/2014 20:09	AR
Surr: Toluene-d8	95.5	81.3-120		%REC	198763	1	11/05/2014 20:09	AR
PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625				**(E625)**				
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	198808	1	11/11/2014 03:13	YH
Surr: 2,4,6-Tribromophenol	80.2	51.5-124		%REC	198808	1	11/11/2014 03:13	YH
Surr: 2-Fluorobiphenyl	82.4	51.7-118		%REC	198808	1	11/11/2014 03:13	YH
Surr: 2-Fluorophenol	53.7	26-120		%REC	198808	1	11/11/2014 03:13	YH
Surr: 4-Terphenyl-d14	78.8	45.2-137		%REC	198808	1	11/11/2014 03:13	YH
Surr: Nitrobenzene-d5	82	42-120		%REC	198808	1	11/11/2014 03:13	YH
Surr: Phenol-d5	34.9	12.3-120		%REC	198808	1	11/11/2014 03:13	YH
Hydrogen Ion (pH) by SM4500 H+ B								
pH	6.66	0.0100	H	pH Units	R279659	1	11/10/2014 15:50	OM

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 14-Nov-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGL Augusta	**Collection Date:**	11/4/2014 10:00:00 AM
Lab ID:	1411157-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	198716	1	11/05/2014 20:15	JL
Chromium	BRL	0.0100		mg/L	198716	1	11/05/2014 20:15	JL
Copper	BRL	0.0250		mg/L	198716	1	11/05/2014 20:15	JL
Nickel	BRL	0.0200		mg/L	198716	1	11/05/2014 20:15	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R279348	1	11/05/2014 06:55	AB

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1411157

Checklist completed by [signature] 11/4/14
Signature Date

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

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

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

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

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

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes X JB 11/4/14 No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by JB

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 14-Nov-14

Client: ERM-Southeast
Project: AGL Augusta
Lab Order: 1411157

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1411157-001A	TRIP BLANK	11/4/2014 12:00:00AM	Aqueous	PP-VOLATILES		11/05/2014	11/06/2014
1411157-002A	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	PP-VOLATILES		11/05/2014	11/05/2014
1411157-002B	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			11/10/2014
1411157-002C	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	Total Metals by ICP		11/05/2014	11/05/2014
1411157-002D	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	PP-SEMIVOLATILE ORGANICS		11/07/2014	11/11/2014
1411157-003A	EFFLUENT COMPOSITE	11/4/2014 10:00:00AM	Groundwater	Hexavalent Chromium			11/05/2014
1411157-003B	EFFLUENT COMPOSITE	11/4/2014 10:00:00AM	Groundwater	Total Metals by ICP		11/05/2014	11/05/2014

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198716

Sample ID: **MB-198716** Client ID: Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5906998**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-198716** Client ID: Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5906999**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.069	0.0600	1.000		107	85	115				
Barium	1.054	0.0100	1.000		105	85	115				
Chromium	1.048	0.0100	1.000		105	85	115				
Copper	1.028	0.0250	1.000	0.002789	102	85	115				
Nickel	1.057	0.0200	1.000		106	85	115				

Sample ID: **1411148-001AMS** Client ID: Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5907001**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.063	0.0600	1.000		106	70	130				
Barium	1.044	0.0100	1.000		104	70	130				
Chromium	1.039	0.0100	1.000		104	70	130				
Copper	1.018	0.0250	1.000		102	70	130				
Nickel	1.045	0.0200	1.000		105	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198716

Sample ID: **1411225-001AMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP** **E200.7**
Units: **mg/L** Prep Date: **11/06/2014** Run No: **279420**
BatchID: **198716** Analysis Date: **11/06/2014** Seq No: **5908785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.055	0.0600	1.000		105	70	130				
Barium	1.003	0.0100	1.000	0.01131	99.2	70	130				
Chromium	1.021	0.0100	1.000	0.01137	101	70	130				
Copper	0.9988	0.0250	1.000	0.01594	98.3	70	130				
Nickel	0.9900	0.0200	1.000	0.005268	98.5	70	130				

Sample ID: **1411148-001AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP** **E200.7**
Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5907002**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.075	0.0600	1.000		107	70	130	1.063	1.08	20	
Barium	1.058	0.0100	1.000		106	70	130	1.044	1.38	20	
Chromium	1.052	0.0100	1.000		105	70	130	1.039	1.32	20	
Copper	1.033	0.0250	1.000		103	70	130	1.018	1.43	20	
Nickel	1.060	0.0200	1.000		106	70	130	1.045	1.36	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198763

Sample ID: **MB-198763**	Client ID:		Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MBLK**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**		BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	41.88	0	50.00		83.8	70.6	123				
Surr: Dibromofluoromethane	49.91	0	50.00		99.8	78.7	124				
Surr: Toluene-d8	47.96	0	50.00		95.9	81.3	120				

Sample ID: **LCS-198763**	Client ID:		Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **LCS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**		BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5907385**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	22.16	5.0	20.00		111	64	136				
Ethylbenzene	23.56	5.0	20.00		118	59	141				
m,p-Xylene	46.12	5.0	40.00		115	69.5	123				
o-Xylene	21.56	5.0	20.00		108	67.9	119				
Toluene	23.26	5.0	20.00		116	75	126				
Surr: 4-Bromofluorobenzene	44.23	0	50.00		88.5	70.6	123				
Surr: Dibromofluoromethane	50.40	0	50.00		101	78.7	124				
Surr: Toluene-d8	50.76	0	50.00		102	81.3	120				

Sample ID: **1411157-002AMS**	Client ID: **EFFLUENT GRAB**		Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**		BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906600**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	16.56	5.0	20.00		82.8	37	151				
Ethylbenzene	18.13	5.0	20.00		90.6	37	162				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198763

Sample ID: **1411157-002AMS**	Client ID: **EFFLUENT GRAB**			Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906600**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	36.23	5.0	40.00		90.6	71.5	145				
o-Xylene	16.39	5.0	20.00		82.0	72	140				
Toluene	17.74	5.0	20.00		88.7	47	150				
Surr: 4-Bromofluorobenzene	46.16	0	50.00		92.3	70.6	123				
Surr: Dibromofluoromethane	50.92	0	50.00		102	78.7	124				
Surr: Toluene-d8	50.14	0	50.00		100	81.3	120				

Sample ID: **1411157-002AMSD**	Client ID: **EFFLUENT GRAB**			Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906601**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.29	5.0	20.00		86.4	37	151	16.56	4.31	19.4	
Ethylbenzene	18.73	5.0	20.00		93.6	37	162	18.13	3.26	19.1	
m,p-Xylene	37.87	5.0	40.00		94.7	71.5	145	36.23	4.43	20.4	
o-Xylene	17.51	5.0	20.00		87.6	72	140	16.39	6.61	18.8	
Toluene	17.59	5.0	20.00		88.0	47	150	17.74	0.849	19.7	
Surr: 4-Bromofluorobenzene	45.06	0	50.00		90.1	70.6	123	46.16	0	0	
Surr: Dibromofluoromethane	50.59	0	50.00		101	78.7	124	50.92	0	0	
Surr: Toluene-d8	50.06	0	50.00		100	81.3	120	50.14	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198808

Sample ID: **MB-198808** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5909226**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	BRL	10									
Surr: 2,4,6-Tribromophenol	76.13	0	100.0		76.1	51.5	124				
Surr: 2-Fluorobiphenyl	29.12	0	50.00		58.2	51.7	118				
Surr: 2-Fluorophenol	53.27	0	100.0		53.3	26	120				
Surr: 4-Terphenyl-d14	37.62	0	50.00		75.2	45.2	137				
Surr: Nitrobenzene-d5	35.32	0	50.00		70.6	42	120				
Surr: Phenol-d5	35.40	0	100.0		35.4	12.3	120				

Sample ID: **LCS-198808** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5909417**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	95.49	10	100.0		95.5	28.9	136.88				
Surr: 2,4,6-Tribromophenol	111.8	0	100.0		112	51.5	124				
Surr: 2-Fluorobiphenyl	47.58	0	50.00		95.2	51.7	118				
Surr: 2-Fluorophenol	69.15	0	100.0		69.2	26	120				
Surr: 4-Terphenyl-d14	50.52	0	50.00		101	45.2	137				
Surr: Nitrobenzene-d5	51.02	0	50.00		102	42	120				
Surr: Phenol-d5	51.33	0	100.0		51.3	12.3	120				

Sample ID: **1411192-001BMS** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5910648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	68.40	50	100.0		68.4	8	158				
Surr: 2,4,6-Tribromophenol	84.40	0	100.0		84.4	51.5	124				
Surr: 2-Fluorobiphenyl	43.10	0	50.00		86.2	51.7	118				
Surr: 2-Fluorophenol	60.20	0	100.0		60.2	26	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198808

Sample ID: **1411192-001BMS** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5910648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Terphenyl-d14	37.80	0	50.00		75.6	45.2	137				
Surr: Nitrobenzene-d5	40.70	0	50.00		81.4	42	120				
Surr: Phenol-d5	52.00	0	100.0		52.0	12.3	120				

Sample ID: **1411192-001BMSD** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5910651**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	82.20	50	100.0		82.2	8	158	68.40	18.3	41.1	
Surr: 2,4,6-Tribromophenol	97.40	0	100.0		97.4	51.5	124	84.40	0	0	
Surr: 2-Fluorobiphenyl	49.50	0	50.00		99.0	51.7	118	43.10	0	0	
Surr: 2-Fluorophenol	69.40	0	100.0		69.4	26	120	60.20	0	0	
Surr: 4-Terphenyl-d14	46.00	0	50.00		92.0	45.2	137	37.80	0	0	
Surr: Nitrobenzene-d5	46.20	0	50.00		92.4	42	120	40.70	0	0	
Surr: Phenol-d5	59.00	0	100.0		59.0	12.3	120	52.00	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: R279348

Sample ID: **MB-R279348** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **MBLK** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905183**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R279348** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **LCS** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905184**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5132	0.010	0.5000		103	90	110				

Sample ID: **1411084-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **MS** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905209**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5218	0.010	0.5000		104	85	115				

Sample ID: **1411084-002BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **MSD** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905221**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5305	0.010	0.5000		106	85	115	0.5218	1.65	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: R279659

Sample ID: **LCS-R279659**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911970**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.050	0.0100	7.000		101	90	110				

Sample ID: **1410H04-003ADUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911992**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.810	0.0100						7.790	0.256	20	H

Sample ID: **1411120-001BDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911989**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	10.27	0.0100						10.30	0.292	20	H

Sample ID: **1411157-002BDUP**	Client ID: **EFFLUENT GRAB**				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911981**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	6.670	0.0100						6.660	0.150	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 17, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Effluent

Dear Greg Jirak: Order No: 1412749

Analytical Environmental Services, Inc. received 3 samples on December 9, 2014 11:55 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1412749

Date: 12/9/14 Page 1 of 1

COMPANY: ERM	ADDRESS: 3200 Windy Hill Road Suite 1500W Atlanta, GA 30339
PHONE: 678-486-2700	FAX:
SAMPLED BY: A Kelly + W. Virgo	SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	pH	BTEX by 624	Hex. Cr.	Barium	Sb, Cr, Cu, Ni	REMARKS	No # of Containers
1	AGLC Eff Grab	12/9/14	920	/		GW	1		2		1			4
2	AGLC Eff Composite	"	920		/	GW				1		1		2
3	Trip Blank	"	—			W			2					2
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	12/9/14 11:55	1: Cataya Reeves	12/9/14 11:55
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGLC Effluent
PROJECT #: 0230712
SITE ADDRESS:
SEND REPORT TO: greg.jirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers: 8

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

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

SPECIAL INSTRUCTIONS/COMMENTS:

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

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 17-Dec-14

Client: ERM-Southeast
Project: AGLC Effluent
Lab ID: 1412749

Case Narrative

Sample Receiving Nonconformance:

Sample for pH analysis by Method E150.1/SM4500 H+ B was received and analyzed outside Method specified holding time of immediate or 15 minutes.

Analytical Environmental Services, Inc **Date:** 17-Dec-14

Client:	ERM-Southeast	**Client Sample ID:**	AGLC EFF GRAB
Project Name:	AGLC Effluent	**Collection Date:**	12/9/2014 9:20:00 AM
Lab ID:	1412749-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.669	0.0100		mg/L	200280	1	12/12/2014 00:19	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	46	5.0		ug/L	200521	1	12/16/2014 11:11	AR
Ethylbenzene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
m,p-Xylene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
o-Xylene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
Toluene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
Surr: 4-Bromofluorobenzene	88	70.6-123		%REC	200521	1	12/16/2014 11:11	AR
Surr: Dibromofluoromethane	92.4	78.7-124		%REC	200521	1	12/16/2014 11:11	AR
Surr: Toluene-d8	90.4	81.3-120		%REC	200521	1	12/16/2014 11:11	AR
Hydrogen Ion (pH) by SM4500 H+ B								
pH	7.05	0.0100	H	pH Units	R281528	1	12/09/2014 14:05	OM

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 17-Dec-14

Client:	ERM-Southeast	**Client Sample ID:**	AGLC EFF COMPOSITE
Project Name:	AGLC Effluent	**Collection Date:**	12/9/2014 9:20:00 AM
Lab ID:	1412749-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	200280	1	12/12/2014 00:23	JL
Chromium	BRL	0.0100		mg/L	200280	1	12/12/2014 00:23	JL
Copper	BRL	0.0250		mg/L	200280	1	12/12/2014 00:23	JL
Nickel	BRL	0.0200		mg/L	200280	1	12/12/2014 00:23	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R281510	1	12/09/2014 12:40	AB

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 17-Dec-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIPBLANK
Project Name:	AGLC Effluent	**Collection Date:**	12/9/2014
Lab ID:	1412749-003	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
Ethylbenzene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
m,p-Xylene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
o-Xylene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
Toluene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
Surr: 4-Bromofluorobenzene	96.4	70.6-123		%REC	200429	1	12/12/2014 12:46	AR
Surr: Dibromofluoromethane	93.3	78.7-124		%REC	200429	1	12/12/2014 12:46	AR
Surr: Toluene-d8	98.6	81.3-120		%REC	200429	1	12/12/2014 12:46	AR

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1412749

Checklist completed by [signature] 12/9/14
Signature Date

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

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

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

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

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

Cooler #1 3.6°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by GM

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

Analytical Environmental Services, Inc

Date: 18-Dec-14

Client: ERM-Southeast
Project: AGLC Effluent
Lab Order: 1412749

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1412749-001A	AGLC EFF GRAB	12/9/2014 9:20:00AM	Groundwater	PP-VOLATILES		12/15/2014	12/16/2014
1412749-001B	AGLC EFF GRAB	12/9/2014 9:20:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			12/09/2014
1412749-001C	AGLC EFF GRAB	12/9/2014 9:20:00AM	Groundwater	Total Metals by ICP		12/10/2014	12/12/2014
1412749-002A	AGLC EFF COMPOSITE	12/9/2014 9:20:00AM	Groundwater	Hexavalent Chromium			12/09/2014
1412749-002B	AGLC EFF COMPOSITE	12/9/2014 9:20:00AM	Groundwater	Total Metals by ICP		12/10/2014	12/12/2014
1412749-003A	TRIPBLANK	12/9/2014 12:00:00AM	Aqueous	PP-VOLATILES		12/12/2014	12/12/2014

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200280

Sample ID: **MB-200280** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963931**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-200280** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963932**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.009	0.0600	1.000		101	85	115				
Barium	1.004	0.0100	1.000		100	85	115				
Chromium	1.005	0.0100	1.000		100	85	115				
Copper	0.9942	0.0250	1.000		99.4	85	115				
Nickel	1.000	0.0200	1.000		100	85	115				

Sample ID: **1412822-005DMS** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963941**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9869	0.0600	1.000		98.7	70	130				
Barium	1.020	0.0100	1.000	0.04345	97.6	70	130				
Chromium	0.9799	0.0100	1.000		98.0	70	130				
Copper	0.9688	0.0250	1.000		96.9	70	130				
Nickel	0.9694	0.0200	1.000		96.9	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200280

Sample ID: **1412837-001FMS** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963934**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9846	0.0600	1.000		98.5	70	130				
Barium	0.9921	0.0100	1.000	0.01855	97.4	70	130				
Chromium	1.140	0.0100	1.000	0.1605	97.9	70	130				
Copper	0.9732	0.0250	1.000	0.004552	96.9	70	130				
Nickel	1.064	0.0200	1.000	0.09581	96.8	70	130				

Sample ID: **1412837-001FMSD** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963935**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9912	0.0600	1.000		99.1	70	130	0.9846	0.668	20	
Barium	1.006	0.0100	1.000	0.01855	98.7	70	130	0.9921	1.34	20	
Chromium	1.156	0.0100	1.000	0.1605	99.6	70	130	1.140	1.45	20	
Copper	0.9902	0.0250	1.000	0.004552	98.6	70	130	0.9732	1.73	20	
Nickel	1.077	0.0200	1.000	0.09581	98.1	70	130	1.064	1.20	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200429

Sample ID: **MB-200429** Client ID: Units: **ug/L** Prep Date: **12/12/2014** Run No: **281793**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200429** Analysis Date: **12/12/2014** Seq No: **5966186**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	46.42	0	50.00		92.8	70.6	123				
Surr: Dibromofluoromethane	44.47	0	50.00		88.9	78.7	124				
Surr: Toluene-d8	48.07	0	50.00		96.1	81.3	120				

Sample ID: **LCS-200429** Client ID: Units: **ug/L** Prep Date: **12/12/2014** Run No: **281793**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200429** Analysis Date: **12/12/2014** Seq No: **5966185**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.76	5.0	20.00		93.8	64	136				
Ethylbenzene	18.41	5.0	20.00		92.0	59	141				
m,p-Xylene	37.25	5.0	40.00		93.1	69.5	123				
o-Xylene	18.09	5.0	20.00		90.4	67.9	119				
Toluene	18.86	5.0	20.00		94.3	75	126				
Surr: 4-Bromofluorobenzene	50.18	0	50.00		100	70.6	123				
Surr: Dibromofluoromethane	46.29	0	50.00		92.6	78.7	124				
Surr: Toluene-d8	49.20	0	50.00		98.4	81.3	120				

Sample ID: **1412797-025AMS** Client ID: Units: **ug/L** Prep Date: **12/12/2014** Run No: **281793**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200429** Analysis Date: **12/12/2014** Seq No: **5977601**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.11	5.0	20.00		90.6	37	151				
Ethylbenzene	17.29	5.0	20.00		86.4	37	162				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200429

Sample ID: **1412797-025AMS**	Client ID:			Units: **ug/L**	Prep Date: **12/12/2014**	Run No: **281793**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200429**	Analysis Date: **12/12/2014**	Seq No: **5977601**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	35.47	5.0	40.00		88.7	71.5	145				
o-Xylene	17.51	5.0	20.00		87.6	72	140				
Toluene	18.21	5.0	20.00		91.0	47	150				
Surr: 4-Bromofluorobenzene	52.36	0	50.00		105	70.6	123				
Surr: Dibromofluoromethane	44.96	0	50.00		89.9	78.7	124				
Surr: Toluene-d8	50.40	0	50.00		101	81.3	120				

Sample ID: **1412797-025AMSD**	Client ID:			Units: **ug/L**	Prep Date: **12/12/2014**	Run No: **281793**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200429**	Analysis Date: **12/12/2014**	Seq No: **5977602**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.76	5.0	20.00		88.8	37	151	18.11	1.95	19.4	
Ethylbenzene	17.52	5.0	20.00		87.6	37	162	17.29	1.32	19.1	
m,p-Xylene	34.96	5.0	40.00		87.4	71.5	145	35.47	1.45	20.4	
o-Xylene	17.58	5.0	20.00		87.9	72	140	17.51	0.399	18.8	
Toluene	18.48	5.0	20.00		92.4	47	150	18.21	1.47	19.7	
Surr: 4-Bromofluorobenzene	51.76	0	50.00		104	70.6	123	52.36	0	0	
Surr: Dibromofluoromethane	45.02	0	50.00		90.0	78.7	124	44.96	0	0	
Surr: Toluene-d8	49.85	0	50.00		99.7	81.3	120	50.40	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200521

Sample ID: **MB-200521** Client ID: Units: **ug/L** Prep Date: **12/15/2014** Run No: **281862**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200521** Analysis Date: **12/15/2014** Seq No: **5972448**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	40.74	0	50.00		81.5	70.6	123				
Surr: Dibromofluoromethane	47.50	0	50.00		95.0	78.7	124				
Surr: Toluene-d8	48.10	0	50.00		96.2	81.3	120				

Sample ID: **LCS-200521** Client ID: Units: **ug/L** Prep Date: **12/15/2014** Run No: **281946**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200521** Analysis Date: **12/16/2014** Seq No: **5972739**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	15.59	5.0	20.00		78.0	64	136				
Ethylbenzene	16.04	5.0	20.00		80.2	59	141				
m,p-Xylene	31.53	5.0	40.00		78.8	69.5	123				
o-Xylene	15.36	5.0	20.00		76.8	67.9	119				
Toluene	15.64	5.0	20.00		78.2	75	126				
Surr: 4-Bromofluorobenzene	50.32	0	50.00		101	70.6	123				
Surr: Dibromofluoromethane	51.58	0	50.00		103	78.7	124				
Surr: Toluene-d8	51.32	0	50.00		103	81.3	120				

Sample ID: **1412D39-001AMS** Client ID: Units: **ug/L** Prep Date: **12/15/2014** Run No: **282042**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200521** Analysis Date: **12/17/2014** Seq No: **5975398**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	21.75	5.0	20.00		109	37	151				
Ethylbenzene	18.23	5.0	20.00		91.2	37	162				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200521

Sample ID: **1412D39-001AMS**	Client ID:			Units: **ug/L**	Prep Date: **12/15/2014**	Run No: **282042**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200521**	Analysis Date: **12/17/2014**	Seq No: **5975398**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	37.38	5.0	40.00		93.4	71.5	145				
o-Xylene	17.69	5.0	20.00		88.4	72	140				
Toluene	21.07	5.0	20.00		105	47	150				
Surr: 4-Bromofluorobenzene	48.76	0	50.00		97.5	70.6	123				
Surr: Dibromofluoromethane	49.36	0	50.00		98.7	78.7	124				
Surr: Toluene-d8	50.77	0	50.00		102	81.3	120				

Sample ID: **1412D39-001AMSD**	Client ID:			Units: **ug/L**	Prep Date: **12/15/2014**	Run No: **282042**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200521**	Analysis Date: **12/17/2014**	Seq No: **5975399**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	20.91	5.0	20.00		105	37	151	21.75	3.94	19.4	
Ethylbenzene	18.69	5.0	20.00		93.4	37	162	18.23	2.49	19.1	
m,p-Xylene	38.59	5.0	40.00		96.5	71.5	145	37.38	3.19	20.4	
o-Xylene	18.32	5.0	20.00		91.6	72	140	17.69	3.50	18.8	
Toluene	21.23	5.0	20.00		106	47	150	21.07	0.757	19.7	
Surr: 4-Bromofluorobenzene	49.05	0	50.00		98.1	70.6	123	48.76	0	0	
Surr: Dibromofluoromethane	48.06	0	50.00		96.1	78.7	124	49.36	0	0	
Surr: Toluene-d8	50.03	0	50.00		100	81.3	120	50.77	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: R281510

Sample ID: **MB-R281510**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958802**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R281510**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5068	0.010	0.5000		101	90	110				

Sample ID: **1412680-001DMS**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958808**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4993	0.010	0.5000		99.9	85	115				

Sample ID: **1412680-001DMSD**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958812**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5103	0.010	0.5000		102	85	115	0.4993	2.18	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: R281528

Sample ID: **LCS-R281528**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **281528**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R281528**		Analysis Date: **12/09/2014**		Seq No: **5959384**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.050	0.0100	7.000		101	90	110				

Sample ID: **1412254-001CDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **281528**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R281528**		Analysis Date: **12/09/2014**		Seq No: **5959443**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.240	0.0100						7.260	0.276	20	H

Sample ID: **1412634-001FDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **281528**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R281528**		Analysis Date: **12/09/2014**		Seq No: **5959444**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.100	0.0100						7.120	0.281	20	H

Qualifiers:

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

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 13, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1502417

Analytical Environmental Services, Inc. received 3 samples on February 5, 2015 2:50 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

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

CHAIN OF CUSTODY

Work Order: 1502417

Date: 2-5-15 Page 1 of 1

COMPANY: ERM	ADDRESS: 3200 Windy Hill Rd Ste 1500W Atlanta, GA 30339
PHONE:	FAX:
SAMPLED BY: Don Downing / James Mullooly	SIGNATURE: Donald Downing

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	BTEX 624-5mL WW	150.1 - pH	6010B - Ba	6010B - Sb, Cr, Cu, Hg	Hexavalent Chromium	No # of Containers	REMARKS
	PRESERVATION (See codes)												
1	TB-01-20150205-01	2-5-15	—	X		W	X					2	
2	Effluent Grab	↓	1100	X		GW	X	X	X			4	
3	Effluent Composite	↓	1100		X	GW				X	X	2	
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Donald Downing	2/5/15 1450	1: Cataya Reeves	2/5/15 2:50p
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGLC Augusta Effluent

PROJECT #: 02809.10 ph046

SITE ADDRESS: Augusta, GA

SEND REPORT TO: Greg J. Rak

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 8

Turnaround Time Request

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

STATE PROGRAM (if any):

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

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS: Hexcr short hold

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER

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

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 13-Feb-15

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1502417

Case Narrative

pH Analysis by Method SM4500 H+ B:

Sample for pH analysis by Method SM4500 H+ B was received and analyzed outside holding time requirement of "immediate or 15 minutes".

Analytical Environmental Services, Inc **Date:** 13-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01-20150205-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	2/5/2015
Lab ID:	1502417-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
Ethylbenzene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
m,p-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
o-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
Toluene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
Surr: 4-Bromofluorobenzene	80.1	70.6-123		%REC	202819	1	02/06/2015 17:45	AR
Surr: Dibromofluoromethane	111	78.7-124		%REC	202819	1	02/06/2015 17:45	AR
Surr: Toluene-d8	89	81.3-120		%REC	202819	1	02/06/2015 17:45	AR

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 13-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	2/5/2015 11:00:00 AM
Lab ID:	1502417-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.0805	0.0100		mg/L	202785	1	02/10/2015 20:08	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
Ethylbenzene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
m,p-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
o-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
Toluene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
Surr: 4-Bromofluorobenzene	80.5	70.6-123		%REC	202819	1	02/06/2015 18:15	AR
Surr: Dibromofluoromethane	105	78.7-124		%REC	202819	1	02/06/2015 18:15	AR
Surr: Toluene-d8	86.8	81.3-120		%REC	202819	1	02/06/2015 18:15	AR
Hydrogen Ion (pH) by SM4500 H+ B								
pH	9.46	0.0100	H	pH Units	R285596	1	02/11/2015 10:30	SG

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 13-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	2/5/2015 11:00:00 AM
Lab ID:	1502417-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	202785	1	02/10/2015 04:44	JL
Chromium	BRL	0.0100		mg/L	202785	1	02/10/2015 04:44	JL
Copper	BRL	0.0250		mg/L	202785	1	02/10/2015 04:44	JL
Nickel	BRL	0.0200		mg/L	202785	1	02/10/2015 04:44	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R285381	1	02/06/2015 08:45	AB

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1502417

Checklist completed by Ioana Paeurar 2/5/15
Signature Date

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

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

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

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

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

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1502417

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1502417-001A	TB-01-20150205-01	2/5/2015 12:00:00AM	Aqueous	PP-VOLATILES		2/6/2015 11:47:00AM	02/06/2015
1502417-002A	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	PP-VOLATILES		2/10/2015 11:30:00AM	02/10/2015
1502417-002A	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	PP-VOLATILES		2/6/2015 11:47:00AM	02/06/2015
1502417-002B	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			02/11/2015
1502417-002C	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	Total Metals by ICP		2/6/2015 1:00:00PM	02/10/2015
1502417-003A	EFFLUENT COMPOSITE	2/5/2015 11:00:00AM	Groundwater	Total Metals by ICP		2/6/2015 1:00:00PM	02/10/2015
1502417-003B	EFFLUENT COMPOSITE	2/5/2015 11:00:00AM	Groundwater	Hexavalent Chromium			02/06/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202785

Sample ID: **MB-202785** Client ID: Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055706**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-202785** Client ID: Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055707**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.021	0.0600	1.000		102	85	115				
Barium	1.031	0.0100	1.000		103	85	115				
Chromium	1.042	0.0100	1.000		104	85	115				
Copper	1.032	0.0250	1.000		103	85	115				
Nickel	1.030	0.0200	1.000		103	85	115				

Sample ID: **1502218-001AMS** Client ID: Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055709**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.021	0.0600	1.000		102	70	130				
Barium	1.037	0.0100	1.000	0.01338	102	70	130				
Chromium	1.032	0.0100	1.000	0.0005022	103	70	130				
Copper	1.023	0.0250	1.000		102	70	130				
Nickel	1.005	0.0200	1.000		101	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202785

Sample ID: **1502329-001AMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055714**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.024	0.0600	1.000		102	70	130				
Barium	1.072	0.0100	1.000	0.04590	103	70	130				
Chromium	1.040	0.0100	1.000	0.0009122	104	70	130				
Copper	1.023	0.0250	1.000		102	70	130				
Nickel	1.018	0.0200	1.000		102	70	130				

Sample ID: **1502218-001AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055710**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.026	0.0600	1.000		103	70	130	1.021	0.411	20	
Barium	1.038	0.0100	1.000	0.01338	102	70	130	1.037	0.098	20	
Chromium	1.031	0.0100	1.000	0.0005022	103	70	130	1.032	0.066	20	
Copper	1.025	0.0250	1.000		102	70	130	1.023	0.196	20	
Nickel	1.009	0.0200	1.000		101	70	130	1.005	0.349	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202819

Sample ID: **MB-202819** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285280**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/06/2015** Seq No: **6054298**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	40.22	0	50.00		80.4	70.6	123				
Surr: Dibromofluoromethane	51.86	0	50.00		104	78.7	124				
Surr: Toluene-d8	44.98	0	50.00		90.0	81.3	120				

Sample ID: **LCS-202819** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285280**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/06/2015** Seq No: **6054297**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.00	5.0	20.00		90.0	64	136				
Ethylbenzene	16.39	5.0	20.00		82.0	59	141				
m,p-Xylene	31.89	5.0	40.00		79.7	69.5	123				
o-Xylene	17.05	5.0	20.00		85.2	67.9	119				
Toluene	17.03	5.0	20.00		85.2	75	126				
Surr: 4-Bromofluorobenzene	48.42	0	50.00		96.8	70.6	123				
Surr: Dibromofluoromethane	53.14	0	50.00		106	78.7	124				
Surr: Toluene-d8	49.37	0	50.00		98.7	81.3	120				

Sample ID: **1502314-001AMS** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285670**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/12/2015** Seq No: **6061618**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	20.84	5.0	20.00		104	37	151				
Ethylbenzene	17.75	5.0	20.00		88.8	37	162				

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202819

Sample ID: **1502314-001AMS** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285670**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/12/2015** Seq No: **6061618**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	BRL	5.0	40.00		12.4	71.5	145				S
o-Xylene	6.520	5.0	20.00		32.6	72	140				S
Toluene	16.38	5.0	20.00		81.9	47	150				
Surr: 4-Bromofluorobenzene	50.32	0	50.00		101	70.6	123				
Surr: Dibromofluoromethane	51.73	0	50.00		103	78.7	124				
Surr: Toluene-d8	49.63	0	50.00		99.3	81.3	120				

Sample ID: **1502314-001AMSD** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285670**
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/12/2015** Seq No: **6061619**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	20.09	5.0	20.00		100	37	151	20.84	3.66	19.4	
Ethylbenzene	17.23	5.0	20.00		86.2	37	162	17.75	2.97	19.1	
m,p-Xylene	BRL	5.0	40.00		11.4	71.5	145	4.940	0	20.4	S
o-Xylene	6.180	5.0	20.00		30.9	72	140	6.520	5.35	18.8	S
Toluene	16.20	5.0	20.00		81.0	47	150	16.38	1.10	19.7	
Surr: 4-Bromofluorobenzene	50.55	0	50.00		101	70.6	123	50.32	0	0	
Surr: Dibromofluoromethane	52.41	0	50.00		105	78.7	124	51.73	0	0	
Surr: Toluene-d8	50.16	0	50.00		100	81.3	120	49.63	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: R285381

Sample ID: **MB-R285381**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054253**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R285381**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054254**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4912	0.010	0.5000		98.2	90	110				

Sample ID: **1502417-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4623	0.010	0.5000		92.5	85	115				

Sample ID: **1502417-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054259**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4785	0.010	0.5000		95.7	85	115	0.4623	3.44	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: R285596

Sample ID: **LCS-R285596**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **285596**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R285596**		Analysis Date: **02/11/2015**		Seq No: **6059658**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.010	0.0100	7.000		100	90	110				

Sample ID: **1502349-001ADUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **285596**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R285596**		Analysis Date: **02/11/2015**		Seq No: **6059660**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.800	0.0100						7.830	0.384	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 17, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1503488

Analytical Environmental Services, Inc. received 3 samples on 3/6/2015 10:44:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1503488

Date: 3/6/15 Page 1 of 1

COMPANY:	ADDRESS:
ERM	3200 Windy Hill Rd SE Ste 1500W Atlanta, GA 30339
PHONE: 678-486-2700	FAX:
SAMPLED BY: U. Virgo / B. Mitchell	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	ANALYSIS REQUESTED: BTEX	pH	6010B-Ba	6010B-Sb, Cr, Cu, Ni	Hex Chrom	Bis 2-ethyl	PRESERVATION (See codes)	REMARKS	No # of Containers
1	TB-01-20150306-01	3/6/15	—			W	X								2
2	Effluent Grab	↓	0830	X		GW	X	X	X			X			6
3	Effluent Composite	↓	0830		X	GW				X	X				2
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Will Virgo	3/6 1644	1: Latoya Reeves	3/6/15 10:44a
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: AGLC Augusta Effluent
PROJECT #: 0280910 PH 046
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg Sirak
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 10

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

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

SPECIAL INSTRUCTIONS/COMMENTS:
Hex Cr shorthold

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

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

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

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1503488

Case Narrative

Method 6010B was listed on the Chain of Custody for metals analysis. Samples were analyzed by method 200.7 per history.

pH Analysis by Method SM4500 H+ B:

Sample for pH analysis by Method SM4500 H+ B was received and analyzed outside of the holding time requirement of "immediate or 15 minutes".

Analytical Environmental Services, Inc **Date:** 16-Mar-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01-20150306-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	3/6/2015
Lab ID:	1503488-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
Ethylbenzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
m,p-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
o-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
Toluene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
Surr: 4-Bromofluorobenzene	93.4	70.6-123		%REC	204375	1	03/13/2015 13:16	AR
Surr: Dibromofluoromethane	80	78.7-124		%REC	204375	1	03/13/2015 13:16	AR
Surr: Toluene-d8	82.8	81.3-120		%REC	204375	1	03/13/2015 13:16	AR

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 16-Mar-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	3/6/2015 8:30:00 AM
Lab ID:	1503488-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.811	0.0100		mg/L	204231	1	03/11/2015 03:13	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
Ethylbenzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
m,p-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
o-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
Toluene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
Surr: 4-Bromofluorobenzene	90.1	70.6-123		%REC	204375	1	03/13/2015 13:40	AR
Surr: Dibromofluoromethane	81.6	78.7-124		%REC	204375	1	03/13/2015 13:40	AR
Surr: Toluene-d8	87.5	81.3-120		%REC	204375	1	03/13/2015 13:40	AR
PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625				**(E625)**				
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	204210	1	03/11/2015 09:39	YH
Surr: 2,4,6-Tribromophenol	89.1	52-133		%REC	204210	1	03/11/2015 09:39	YH
Surr: 2-Fluorobiphenyl	72.9	50-121		%REC	204210	1	03/11/2015 09:39	YH
Surr: 2-Fluorophenol	42	27.5-120		%REC	204210	1	03/11/2015 09:39	YH
Surr: 4-Terphenyl-d14	74.1	46.3-137		%REC	204210	1	03/11/2015 09:39	YH
Surr: Nitrobenzene-d5	67.6	41.2-121		%REC	204210	1	03/11/2015 09:39	YH
Surr: Phenol-d5	30.7	14.3-120		%REC	204210	1	03/11/2015 09:39	YH
Hydrogen Ion (pH) by SM4500 H+ B								
pH	7.23	0.0100	H	pH Units	R287428	1	03/12/2015 10:16	OM

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 16-Mar-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	3/6/2015 8:30:00 AM
Lab ID:	1503488-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	204231	1	03/11/2015 22:38	JL
Chromium	BRL	0.0100		mg/L	204231	1	03/11/2015 22:38	JL
Copper	BRL	0.0250		mg/L	204231	1	03/11/2015 22:38	JL
Nickel	BRL	0.0200		mg/L	204231	1	03/11/2015 22:38	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R287118	1	03/06/2015 11:40	AB

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1503488

Checklist completed by [signature] 3/6/15
Signature Date

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

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

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

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

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

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes / No __

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

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

Samples in proper container/bottle? Yes / No __

Sample containers intact? Yes / No __

Sufficient sample volume for indicated test? Yes / No __

All samples received within holding time? Yes X JB 3/6/15 No __

Was TAT marked on the COC? Yes / No __

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

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

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

Adjusted? _____ Checked by JB

Sample Condition: Good / Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1503488

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1503488-001A	TB-01-20150306-01	3/6/2015 12:00:00AM	Aqueous	PP-VOLATILES		3/11/2015 10:09:00PM	03/13/2015
1503488-002A	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	PP-VOLATILES		3/11/2015 10:09:00PM	03/13/2015
1503488-002B	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	Total Metals by ICP		3/10/2015 11:40:00AM	03/11/2015
1503488-002C	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			03/12/2015
1503488-002D	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	PP-SEMIVOLATILE ORGANICS		3/10/2015 8:00:00AM	03/11/2015
1503488-003A	EFFLUENT COMPOSITE	3/6/2015 8:30:00AM	Groundwater	Total Metals by ICP		3/11/2015 9:00:00AM	03/11/2015
1503488-003B	EFFLUENT COMPOSITE	3/6/2015 8:30:00AM	Groundwater	Hexavalent Chromium			03/06/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204210

Sample ID: **MB-204210** Client ID: Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101284**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	BRL	5.0									
Surr: 2,4,6-Tribromophenol	52.66	0	50.00		105	52	133				
Surr: 2-Fluorobiphenyl	20.89	0	25.00		83.6	50	121				
Surr: 2-Fluorophenol	24.08	0	50.00		48.2	27.5	120				
Surr: 4-Terphenyl-d14	22.06	0	25.00		88.2	46.3	137				
Surr: Nitrobenzene-d5	19.17	0	25.00		76.7	41.2	121				
Surr: Phenol-d5	15.90	0	50.00		31.8	14.3	120				

Sample ID: **LCS-204210** Client ID: Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101988**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	48.27	5.0	50.00		96.5	28.9	136.88				
Surr: 2,4,6-Tribromophenol	56.20	0	50.00		112	52	133				
Surr: 2-Fluorobiphenyl	22.27	0	25.00		89.1	50	121				
Surr: 2-Fluorophenol	22.28	0	50.00		44.6	27.5	120				
Surr: 4-Terphenyl-d14	23.48	0	25.00		93.9	46.3	137				
Surr: Nitrobenzene-d5	21.91	0	25.00		87.6	41.2	121				
Surr: Phenol-d5	15.34	0	50.00		30.7	14.3	120				

Sample ID: **1503595-004AMS** Client ID: Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101950**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	94.00	50	100.0	9.750	84.2	8	158				
Surr: 2,4,6-Tribromophenol	94.85	0	100.0		94.8	52	133				
Surr: 2-Fluorobiphenyl	39.85	0	50.00		79.7	50	121				
Surr: 2-Fluorophenol	51.05	0	100.0		51.0	27.5	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204210

Sample ID: **1503595-004AMS** Client ID:
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625**
Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101950**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Terphenyl-d14	39.10	0	50.00		78.2	46.3	137				
Surr: Nitrobenzene-d5	36.55	0	50.00		73.1	41.2	121				
Surr: Phenol-d5	41.75	0	100.0		41.8	14.3	120				

Sample ID: **1503595-004AMSD** Client ID:
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625**
Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101951**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	87.85	50	100.0	9.750	78.1	8	158	94.00	6.76	41.1	
Surr: 2,4,6-Tribromophenol	89.55	0	100.0		89.6	52	133	94.85	0	0	
Surr: 2-Fluorobiphenyl	38.25	0	50.00		76.5	50	121	39.85	0	0	
Surr: 2-Fluorophenol	53.95	0	100.0		54.0	27.5	120	51.05	0	0	
Surr: 4-Terphenyl-d14	36.75	0	50.00		73.5	46.3	137	39.10	0	0	
Surr: Nitrobenzene-d5	38.70	0	50.00		77.4	41.2	121	36.55	0	0	
Surr: Phenol-d5	43.10	0	100.0		43.1	14.3	120	41.75	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204231

Sample ID: **MB-204231** Client ID: Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102877**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-204231** Client ID: Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102878**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.033	0.0600	1.000	0.002693	103	85	115				
Barium	1.041	0.0100	1.000		104	85	115				
Chromium	1.071	0.0100	1.000		107	85	115				
Copper	1.029	0.0250	1.000		103	85	115				
Nickel	1.032	0.0200	1.000		103	85	115				

Sample ID: **1503488-002BMS** Client ID: **EFFLUENT GRAB** Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102887**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.036	0.0600	1.000		104	70	130				
Barium	1.809	0.0100	1.000	0.8115	99.7	70	130				
Chromium	1.064	0.0100	1.000	0.0007551	106	70	130				
Copper	1.021	0.0250	1.000		102	70	130				
Nickel	0.9851	0.0200	1.000		98.5	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204231

Sample ID: **1503729-002AMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102880**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9912	0.0600	1.000		99.1	70	130				
Barium	0.9703	0.0100	1.000	0.02701	94.3	70	130				
Chromium	1.012	0.0100	1.000	0.01505	99.7	70	130				
Copper	0.9906	0.0250	1.000	0.03814	95.2	70	130				
Nickel	0.9274	0.0200	1.000		92.7	70	130				

Sample ID: **1503729-002AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102881**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9909	0.0600	1.000		99.1	70	130	0.9912	0.029	20	
Barium	0.9804	0.0100	1.000	0.02701	95.3	70	130	0.9703	1.03	20	
Chromium	1.022	0.0100	1.000	0.01505	101	70	130	1.012	0.987	20	
Copper	0.9989	0.0250	1.000	0.03814	96.1	70	130	0.9906	0.842	20	
Nickel	0.9356	0.0200	1.000		93.6	70	130	0.9274	0.879	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204375

Sample ID: **MB-204375** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106863**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	44.39	0	50.00		88.8	70.6	123				
Surr: Dibromofluoromethane	43.96	0	50.00		87.9	78.7	124				
Surr: Toluene-d8	42.74	0	50.00		85.5	81.3	120				

Sample ID: **LCS-204375** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106865**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	19.16	5.0	20.00		95.8	64	136				
Ethylbenzene	19.30	5.0	20.00		96.5	59	141				
m,p-Xylene	43.26	5.0	40.00		108	69.5	123				
o-Xylene	19.48	5.0	20.00		97.4	67.9	119				
Toluene	19.51	5.0	20.00		97.6	75	126				
Surr: 4-Bromofluorobenzene	49.11	0	50.00		98.2	70.6	123				
Surr: Dibromofluoromethane	44.37	0	50.00		88.7	78.7	124				
Surr: Toluene-d8	47.81	0	50.00		95.6	81.3	120				

Sample ID: **1503A17-001AMS** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106866**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	2110	500	2000		106	37	151				
Ethylbenzene	2149	500	2000		107	37	162				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204375

Sample ID: **1503A17-001AMS** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106866**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	9045	500	4000	4310	118	71.5	145				
o-Xylene	2122	500	2000		106	72	140				
Toluene	2151	500	2000		108	47	150				
Surr: 4-Bromofluorobenzene	4792	0	5000		95.8	70.6	123				
Surr: Dibromofluoromethane	4367	0	5000		87.3	78.7	124				
Surr: Toluene-d8	4730	0	5000		94.6	81.3	120				

Sample ID: **1503A17-001AMSD** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106867**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	2023	500	2000		101	37	151	2110	4.21	19.4	
Ethylbenzene	2085	500	2000		104	37	162	2149	3.02	19.1	
m,p-Xylene	8503	500	4000	4310	105	71.5	145	9045	6.18	20.4	
o-Xylene	2027	500	2000		101	72	140	2122	4.58	18.8	
Toluene	2057	500	2000		103	47	150	2151	4.47	19.7	
Surr: 4-Bromofluorobenzene	4760	0	5000		95.2	70.6	123	4792	0	0	
Surr: Dibromofluoromethane	4405	0	5000		88.1	78.7	124	4367	0	0	
Surr: Toluene-d8	4723	0	5000		94.5	81.3	120	4730	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: R287118

Sample ID: **MB-R287118**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096471**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R287118**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096472**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4807	0.010	0.5000		96.1	90	110				

Sample ID: **1503488-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4839	0.010	0.5000		96.8	85	115				

Sample ID: **1503488-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096549**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4765	0.010	0.5000		95.3	85	115	0.4839	1.54	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: R287428

Sample ID: **LCS-R287428**	Client ID:			Units: **pH Units**	Prep Date:	Run No: **287428**
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**			BatchID: **R287428**	Analysis Date: **03/12/2015**	Seq No: **6105104**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.000	0.0100	7.000		100	90	110				

Sample ID: **1503803-001BDUP**	Client ID:			Units: **pH Units**	Prep Date:	Run No: **287428**
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**			BatchID: **R287428**	Analysis Date: **03/12/2015**	Seq No: **6105119**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	6.800	0.0100						6.700	1.48	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

April 13, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGL Augusta

Dear Greg Jirak: Order No: 1504239

Analytical Environmental Services, Inc. received 3 samples on 4/3/2015 10:35:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1504239

Date: 4/3/2015 Page 1 of 1

COMPANY: ERM

ADDRESS: 3200 Windy Hill Rd SE Ste 1500W Atlanta, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: V. Virgo / B. Mitchell

SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	PH	BTEX	Total Metals	Hex Chrom	REMARKS	No # of Containers
1	Effluent Grab	4/3/15	0730	X		GW	1 2						3
2	Effluent Composite		0730		X	GW				1	1		2
3	Trip Blank		—			W							1
4	Temp Blank		—			W							1
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

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

RELINQUISHED BY / DATE/TIME
1: Bill Mitchell 4-3-15 10:35

RECEIVED BY / DATE/TIME
1: Latoya Reeves 4/3/15 10:35
2:
3:

PROJECT INFORMATION
PROJECT NAME: AGL Augusta
PROJECT #:
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg.Sirak@ERM.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 7

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

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

SPECIAL INSTRUCTIONS/COMMENTS:

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

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

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

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

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGL Augusta
Lab ID: 1504239

Case Narrative

Sample Receiving Nonconformance:

Sample for pH analysis by Method SM4500 H+ B was received and analyzed outside of the method specified holding time of immediate or 15 minutes.

Sample for Barium analysis was not received and was not listed on the Chain of Custody (COC) for sample "Effluent Grab"; however, Barium is usually reported per project history. Per Greg Jirak 4/3/2015, sample needed for Barium analysis was split and preserved from the unpreserved sample that was received for pH analysis. Chemical preservatives were added to meet method specified pH requirements for the requested test methods.

Analytical Environmental Services, Inc **Date:** 13-Apr-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGL Augusta	**Collection Date:**	4/3/2015 7:30:00 AM
Lab ID:	1504239-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.755	0.0100		mg/L	205531	1	04/07/2015 22:41	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
Ethylbenzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
m,p-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
o-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
Toluene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
Surr: 4-Bromofluorobenzene	101	70.6-123		%REC	205622	1	04/06/2015 20:56	MD
Surr: Dibromofluoromethane	100	78.7-124		%REC	205622	1	04/06/2015 20:56	MD
Surr: Toluene-d8	95.7	81.3-120		%REC	205622	1	04/06/2015 20:56	MD
Hydrogen Ion (pH) by SM4500 H+ B								
pH	7.07	0.0100	H	pH Units	R289312	1	04/07/2015 09:15	JS

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 13-Apr-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGL Augusta	**Collection Date:**	4/3/2015 7:30:00 AM
Lab ID:	1504239-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	205531	1	04/07/2015 22:51	JL
Chromium	BRL	0.0100		mg/L	205531	1	04/07/2015 22:51	JL
Copper	BRL	0.0250		mg/L	205531	1	04/07/2015 22:51	JL
Nickel	BRL	0.0200		mg/L	205531	1	04/07/2015 22:51	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R289242	1	04/03/2015 12:10	OM

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 13-Apr-15

Client:	ERM-Southeast	**Client Sample ID:**	TRIP BLANK
Project Name:	AGL Augusta	**Collection Date:**	4/3/2015
Lab ID:	1504239-003	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
Ethylbenzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
m,p-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
o-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
Toluene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
Surr: 4-Bromofluorobenzene	102	70.6-123		%REC	205622	1	04/06/2015 20:30	MD
Surr: Dibromofluoromethane	100	78.7-124		%REC	205622	1	04/06/2015 20:30	MD
Surr: Toluene-d8	94.8	81.3-120		%REC	205622	1	04/06/2015 20:30	MD

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1504239

Checklist completed by Tanya Delis 4/3/15
Signature Date

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

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

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

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

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

Cooler #1 3.0 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

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

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

Water - pH acceptable upon receipt? Yes ✓ 4 mls vials No ✓ Not Applicable __

Adjusted? MJ Checked by Tanya

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGL Augusta
Lab Order: 1504239

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1504239-001A	EFFLUENT GRAB	4/3/2015 7:30:00AM	Groundwater	PP-VOLATILES		4/6/2015 11:55:00AM	04/06/2015
1504239-001B	EFFLUENT GRAB	4/3/2015 7:30:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			04/07/2015
1504239-001C	EFFLUENT GRAB	4/3/2015 7:30:00AM	Groundwater	Total Metals by ICP		4/4/2015 9:45:00AM	04/07/2015
1504239-002A	EFFLUENT COMPOSITE	4/3/2015 7:30:00AM	Groundwater	Total Metals by ICP		4/4/2015 9:45:00AM	04/07/2015
1504239-002B	EFFLUENT COMPOSITE	4/3/2015 7:30:00AM	Groundwater	Hexavalent Chromium			04/03/2015
1504239-003A	TRIP BLANK	4/3/2015 12:00:00AM	Aqueous	PP-VOLATILES		4/6/2015 11:55:00AM	04/06/2015

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1504239-001C	Metal	6	<2	HNO3	600-78	.25 mL Pellets	1	MS	4/3/15	16:50
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
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						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205531

Sample ID: **MB-205531** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151384**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-205531** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151385**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.063	0.0600	1.000		106	85	115				
Barium	1.055	0.0100	1.000		106	85	115				
Chromium	1.106	0.0100	1.000		111	85	115				
Copper	1.041	0.0250	1.000		104	85	115				
Nickel	1.046	0.0200	1.000		105	85	115				

Sample ID: **1504119-001BMS** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151387**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.075	0.0600	1.000		108	70	130				
Barium	1.086	0.0100	1.000	0.03335	105	70	130				
Chromium	1.109	0.0100	1.000	0.002344	111	70	130				
Copper	1.060	0.0250	1.000	0.003096	106	70	130				
Nickel	1.029	0.0200	1.000	0.003300	103	70	130				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205531

Sample ID: **1504196-001AMS** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151392**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.057	0.0600	1.000		106	70	130				
Barium	1.052	0.0100	1.000	0.01148	104	70	130				
Chromium	1.094	0.0100	1.000		109	70	130				
Copper	1.034	0.0250	1.000		103	70	130				
Nickel	1.034	0.0200	1.000		103	70	130				

Sample ID: **1504119-001BMSD** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151388**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.067	0.0600	1.000		107	70	130	1.075	0.765	20	
Barium	1.074	0.0100	1.000	0.03335	104	70	130	1.086	1.11	20	
Chromium	1.096	0.0100	1.000	0.002344	109	70	130	1.109	1.23	20	
Copper	1.045	0.0250	1.000	0.003096	104	70	130	1.060	1.43	20	
Nickel	1.017	0.0200	1.000	0.003300	101	70	130	1.029	1.21	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205622

Sample ID: **MB-205622** Client ID: Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149205**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	49.99	0	50.00		100.0	70.6	123				
Surr: Dibromofluoromethane	47.88	0	50.00		95.8	78.7	124				
Surr: Toluene-d8	47.35	0	50.00		94.7	81.3	120				

Sample ID: **LCS-205622** Client ID: Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149209**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	19.67	5.00	20.00		98.4	64	136				
Ethylbenzene	21.00	5.00	20.00		105	59	141				
m,p-Xylene	40.55	5.0	40.00		101	69.5	123				
o-Xylene	20.41	5.0	20.00		102	67.9	119				
Toluene	20.61	5.0	20.00		103	75	126				
Surr: 4-Bromofluorobenzene	55.91	0	50.00		112	70.6	123				
Surr: Dibromofluoromethane	49.14	0	50.00		98.3	78.7	124				
Surr: Toluene-d8	49.24	0	50.00		98.5	81.3	120				

Sample ID: **1504277-003AMS** Client ID: Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149207**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	956.5	250	1000		95.6	37	151				
Ethylbenzene	1072	250	1000		107	37	162				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205622

Sample ID: **1504277-003AMS** Client ID:
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624**
Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149207**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	2048	250	2000		102	71.5	145				
o-Xylene	1016	250	1000		102	72	140				
Toluene	964.0	250	1000		96.4	47	150				
Surr: 4-Bromofluorobenzene	2752	0	2500		110	70.6	123				
Surr: Dibromofluoromethane	2400	0	2500		96.0	78.7	124				
Surr: Toluene-d8	2452	0	2500		98.1	81.3	120				

Sample ID: **1504277-003AMSD** Client ID:
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-VOLATILES E624**
Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149208**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	937.0	250	1000		93.7	37	151	956.5	2.06	19.4	
Ethylbenzene	1032	250	1000		103	37	162	1072	3.80	19.1	
m,p-Xylene	2004	250	2000		100	71.5	145	2048	2.15	20.4	
o-Xylene	993.5	250	1000		99.4	72	140	1016	2.24	18.8	
Toluene	948.5	250	1000		94.8	47	150	964.0	1.62	19.7	
Surr: 4-Bromofluorobenzene	2802	0	2500		112	70.6	123	2752	0	0	
Surr: Dibromofluoromethane	2419	0	2500		96.8	78.7	124	2400	0	0	
Surr: Toluene-d8	2416	0	2500		96.7	81.3	120	2452	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: R289242

Sample ID: **MB-R289242**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147435**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R289242**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147436**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4743	0.010	0.5000		94.9	90	110				

Sample ID: **1504165-001EMS**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147450**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.3962	0.010	0.5000		79.2	85	115				S

Sample ID: **1504165-001EMSD**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147464**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.3952	0.010	0.5000		79.0	85	115	0.3962	0.253	30	S

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: R289312

Sample ID: **LCS-R289312**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **289312**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R289312**		Analysis Date: **04/07/2015**		Seq No: **6149413**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.040	0.0100	7.000		101	90	110				

Sample ID: **1504032-001ADUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **289312**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R289312**		Analysis Date: **04/07/2015**		Seq No: **6149428**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.090	0.0100						7.100	0.141	20	H

Sample ID: **1504344-001CDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **289312**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R289312**		Analysis Date: **04/07/2015**		Seq No: **6149431**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	5.790	0.0100						5.780	0.173	20	H

Qualifiers:

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

Seepage Velocity Calculations

Appendix C

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix C
Seepage Velocity Calculations
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

Hydrogeologic Unit	Hydraulic Conductivity (cm/sec)	Porosity (unitless)	January 12, 2015		Monitoring wells used for gradient calculations
			Gradient	Velocity (ft/day)	
Alluvium	1.170E-03	3.90E-01	1.46E-02	1.2E-01	MW-17 & 124 contour
Galliard	1.500E-04	4.50E-01	1.05E-02	9.9E-03	MW-207; MW-602; MW-309D
Galliard	1.500E-04	4.50E-01	2.50E-03	2.4E-03	MW-21; MW-25; MW-203
Galliard	1.500E-04	4.50E-01	8.20E-03	7.7E-03	MW-19; MW-205; MW-206
Saprolite	8.980E-06	5.30E-01	1.80E-03	8.6E-05	MW-214; MW-306SAP; MW-310SAP
Bedrock*	9.348E-04	1.42E-02	3.28E-03	6.1E-01	MW-318; MW-325; MW-513BR
Bedrock*	9.348E-04	1.42E-02	1.47E-03	2.7E-01	MW-313; MW-309BR; MW-503BR
Bedrock*	9.348E-04	6.00E-01	3.28E-03	1.4E-02	MW-318; MW-325; MW-513BR
Bedrock*	9.348E-04	6.00E-01	1.47E-03	6.5E-03	MW-313; MW-309BR; MW-503BR

*Bedrock porosity range taken from Applied Hydrogeology 4th Ed., Fetter, 2001
Multiple bedrock and Galliard gradients are presented from different areas of the site.
Porosities used in velocity calcuations are average porosities from RETEC, 2003 Remedial Investigation
Vs=Ki/n
where:
Vs=seepage velocity (velocity)
K=horizontal hydraulic conductivity
i=horizontal hydraulic gradient (gradient)
n=porosity

N

MW-408S
(124.96)

TELFAIR ST

WALKER ST

Gradient Calculation			
Points	Distance	Rise	Gradient
MW-17 & 124 Contour	220	3.22	0.0146

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

WALTON WAY

126

125

124

127

MW-501S
(125.60)

MW-306S
(124.58)

MW-402S
(123.27)

NORTHERN
PARCEL

WESTERN
PARCEL

MW-17
(127.22)

MW-401S
(126.70)

MW-05

0 200 Feet

(127.22) Groundwater Elevation (Feet MSL)

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Flow Line Used for Groundwater Gradient Estimation

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

*MW-408S was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-1GWElevAlluvium.mxd

FIGURE C-1
GROUNDWATER ELEVATION MAP FOR THE ALLUVIUM JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408DR*
(124.67)

TELFAIR ST

WALKER ST

9TH ST

MW-603
(124.30)

FENWICK ST

8TH ST

MW-404DR
(125.60)

WALTON WAY

MW-502D
(124.19)

MW-306D
(124.18)

MW-600
(125.21)

$\frac{dh}{dL} = \frac{123.5-122}{600} = 0.00250$

MW-307D
(124.67)

MW-24
(123.74)

MW-21
(121.66)

7TH ST

MW-310D
(124.39)

MW-402D
(124.23)

NORTHERN
PARCEL

122.0

122.5

123.0

MW-211
(NM)

MW-202DR
(124.07)

MW-601
(124.00)

KING ST

123.5

MW-19
(127.71)

127.5

127.0

126.5

126.0

125.5

125.0

124.5

MW-205
(124.02)

MW-203
(123.95)

$\frac{dh}{dL} = \frac{127.5-124.5}{366} = 0.00820$

MW-22
(123.92)

MW-401D
(124.20)

TAYLOR ST

MW-12
(123.88)

MW-25
(123.77)

SOUTHERN
PARCEL

MW-206
(123.94)

126.5

126

125.5

125.0

124.5

124.0

MW-207
(126.65)

MW-309D
(123.51)

MW-505D
(123.68)

MW-304
(123.08)

MW-303
(123.23)

MW-602
(122.70)

$\frac{dh}{dL} = \frac{126.5-124}{239} = 0.0105$

0 200 Feet

(123.10) Groundwater Elevation (Feet MSL)

(NM) Not Measured

Apparent Groundwater Contour (Dashed where inferred)

Apparent Groundwater Flow Direction

Galliard Monitoring Well

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

*MW-408DR was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/11/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-2GWElevGalliard.mxd

FIGURE C-2
3-POINT GRADIENT ESTIMATION FOR THE GALLIARD
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

MW-317
(NM)

9TH ST

FENWICK ST

8TH ST

7TH ST

WALTON WAY

MW-306SAP
(124.21)

MW-307SAP
(123.17)

MW-310SAP
(124.32)

NORTHERN
PARCEL

$$\frac{dh}{dL} = \frac{124\text{-}123}{555} = 0.00180$$

124.0

123.5

KING ST

WESTERN
PARCEL

MW-214
(122.93)

MW-401SAP
(124.33)

123.0

MW-311
(123.65)

TAYLOR ST

SOUTHERN
PARCEL

MW-309SAP
(NM)

(121.25) Groundwater Elevation (Feet MSL)

Saprolite Monitoring Well

Apparent Groundwater Contour
(Dashed where inferred)

Apparent Groundwater Flow Direction

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation)
Area

NOTE:
MW-306SAP, MW-307SAP, MW-309SAP and MW-310SAP are in Depth Discrete Sampling Port (DDSP) wells.

NM = Not measured

0 200
Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-3GWElevSaprolite.mxd

FIGURE C-3
3-POINT GRADIENT ESTIMATION FOR THE SAPROLITE
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-319 (124.08)

TELFAIR ST

WALKER ST

MW-320 (123.24)

MW-318 (123.28)

MW-315 (123.97)

9TH ST

MW-513BR (123.54)

123.0

122.5

122.0

121.5

MW-325 (121.29)

$\frac{dh}{dL} = \frac{123\text{-}121.5}{457} = 0.00328$

FENWICK ST

8TH ST

WALTON WAY

MW-306BR (123.77)

MW-306TZ (123.84)

MW-512BR (123.86)

MW-511BR (123.84)

MW-307TZ (NM)

MW-323 (120.35)

MW-324 (120.66)

MW-321 (120.10)

MW-322 (120.63)

MW-316 (120.75)

MW-307BR

MW-503BR (123.90)

MW-504BR (123.89)

7TH ST

MW-310BR* (129.98)

MW-310TZ (NM)

NORTHERN PARCEL

MW-510BR (123.76)

123.5

MW-313 (122.49)

MW-509BR (123.78)

KING ST

WESTERN PARCEL

MW-213 (123.15)

MW-308BR

123.0

TAYLOR ST

MW-500BR (123.82)

SOUTHERN PARCEL

MW-508BR (123.31)

122.5

MW-506BR

$\frac{dh}{dL} = \frac{123.5\text{-}122.5}{681} = 0.00147$

MW-309TZ (NM)

MW-309BR (122.24)

MW-507BR (121.88)

0 200 Feet

(122.49) Groundwater Elevation (Feet MSL)

Bedrock Monitoring Well

Bedrock Recovery Well

Transition Well

Destroyed Bedrock Monitoring Well

Apparent Groundwater Contour (Dashed where inferred)

Apparent Groundwater Flow Direction

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

NM = Not measured

Dashed where inferred

* MW-310BR is an anomalous point and was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/11/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-4GWBdrkTZ.mxd

FIGURE C-4
3-POINT GRADIENT ESTIMATION FOR THE BEDROCK AND TRANSITION WELLS - JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

ERM Analytical Data Validation Checklist

Appendix D

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Sample Submittals
AGLC/Augusta
January 12-29, 2015 Sampling Event

Matrix	Sample ID	Laboratory ID
Water	MW-21-20150112-01	1501859-001
Water	MW-320-20150112-01	1501859-002
Water	MW-207-20150112-01	1501859-003
Water	MW-402S-20150112-01	1501859-004
Water	MW-310BR-20150112-01	1501859-005
Water	MW-307D-20150112-01	1501859-006
Water	TB-01	1501859-007
Water	MW-321-20150113-01	1501895-001
Water	MW-325-20150113-01	1501895-002
Water	MW-602-20150113-01	1501895-003
Water	MW-306D-20150113-01	1501895-004
Water	MW-324-20150113-01	1501895-005
Water	MW-213-20150113-01	1501895-006
Water	MW-408D-20150113-01	1501895-007
Water	MW-307SAP-20150113-01	1501895-008
Water	MW-306TZ-20150113-01	1501895-009
Water	MW-202DR-20150113-01	1501895-010
Water	MW-214-20150113-01	1501895-011
Water	MW-402D-20150113-01	1501895-012
Water	MW-315-20150113-01	1501895-013
Water	MW-303-20150113-01	1501895-014
Water	MW-22-20150113-01	1501895-015
Water	MW-310SAP-20150113-01	1501895-016
Water	MW-313-20150113-01	1501895-017
Water	MW-309BR-20150113-01	1501895-018
Water	DUP-01-20150113-01	1501895-019
Water	DUP-02-20150113-01	1501895-020
Water	TB-01	1501895-021
Water	TB-02	1501895-022
Water	MW-306SAP-20150114-01	1501A32-001
Water	MW-504BR-20150114-01	1501A32-002
Water	MW-511BR-20150114-01	1501A32-003
Water	MW-500BR-20150114-01	1501A32-004
Water	MW-600-20150114-01	1501A32-005
Water	MW-510BR-20150114-01	1501A32-006
Water	MW-306BR-20150114-01	1501A32-007
Water	MW-601-20150114-01	1501A32-008
Water	MW-513BR-20150114-01	1501A32-009
Water	MW-12-20150114-01	1501A32-010
Water	MW-401D-20150114-01	1501A32-011
Water	MW-206-20150114-01	1501A32-012

Sample Submittals
AGLC/Augusta
January 12-29, 2015 Sampling Event

Matrix	Sample ID	Laboratory ID
Water	MW-319-20150114-01	1501A32-013
Water	MW-318-20150114-01	1501A32-014
Water	MW-203-20150114-01	1501A32-015
Water	MW-512BR-20150114-01	1501A32-016
Water	MW-404DR-20150114-01	1501A32-017
Water	MW-19-20150114-01	1501A32-018
Water	MW-401SAP-20150114-01	1501A32-019
Water	DUP-03-20150114-01	1501A32-020
Water	TB-01	1501A32-021
Water	MW-509BR-20150115-01	1501A82-001
Water	MW-505D-20150115-01	1501A82-002
Water	MW-505D-20150115-01	1501A82-002
Water	MW-507BR-2015115-01	1501A82-003
Water	MW-501S-20150115-01	1501A82-004
Water	MW-401S-20150115-01	1501A82-005
Water	MW-408DR-20150115-01	1501A82-006
Water	MW-508BR-20150115-01	1501A82-007
Water	MW-304-20150115-01	1501A82-008
Water	MW-408S-20150115-01	1501A82-009
Water	MW-503BR-20150115-01	1501B40-001
Water	MW-311-20150115-01	1501B40-002
Water	MW-307BR-20150115-01	1501B40-003
Water	DUP-4-20150115-01	1501B40-004
Water	TB-01	1501B40-005
Water	TB-01-20150129-01	1501N94-001
Water	DUP-05-20150129-01	1501N94-002
Water	DUP-06-20150129-01	1501N94-003
Water	MW-308BR-20150129-01	1501N94-004
Water	MW-307D-20150129-01	1501N94-005
Water	MW-207-20150129-01	1501N94-006
Water	MW-401SAP-20150129-01	1501N94-007
Water	MW-309BR-20150129-01	1501N94-008

ERM Analytical Data Validation Checklist

Project Name: AGLC/Augusta	Laboratory: Analytical Environmental Services, Inc.
Project Reference: 0230712	Sample Matrix: Aqueous
ERM Project Phase Number: 054	1/12/2015
Date Validated: April 28, 2015	Sample End Date: 1/29/2015

Sample Analyzed: At least ten percent (10%) of the samples collected were chosen for validation. The following samples within were validated. For a full list of the samples collected, see the sample submittal summary above.

DUP-01-20150113-01	MW-306TZ-20150113-01	DUP-4-20150115-01	MW-307BR-20150115-01
DUP-02-20150113-01	MW-315-20150113-01	DUP-05-20150129-01	MW-308BR-20150129-01
DUP-03-20150114-01	MW-12-20150114-01	DUP-06-20150129-01	MW-401SAP-20150129-01

Parameters Analyzed: Volatile Organic Compounds by SW-5030B method 8260B, CH_4 by RSK method RSK-175, O_2 by E360.1, CO_2 by SM4500, Semivolatile Organic Compounds by SW-846 method 8270D, Total ICP Metals (Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, V, and Zn) by SW-3010A Method 6010C, Total Mercury (Hg) by method SW7470A, Total Cyanide by method SM4500 CN-C E, Nitrate and sulfate by Method 9056, and Ferrous Iron (Fe^{2+}) by Standard Method SM 3500-Fe-B.

Laboratory Project IDs: 1407C32, 1407D48, 1407E29, and 1407F77

PRECISION, ACCURACY, METHOD CONFORMANCE, AND COMPLETENESS ASSESSMENT

Precision:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Laboratory precision was evaluated using laboratory control samples (LCSs), laboratory duplicates, and matrix spike duplicates (MSDs). Field sampling precision was evaluated using field duplicates. Evaluation of duplicates was done using the Relative Percent Difference (RPD). The RPD is defined as the difference between two duplicate sample results divided by the mean, and expressed as a percent. Overall, laboratory and field sampling precision were acceptable.

Accuracy:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Accuracy is a measure of the system bias. Laboratory accuracy was evaluated using blanks, matrix spikes (MSs), LCSs, and surrogate recoveries. Overall, laboratory accuracy was acceptable.

Method Compliance:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Method compliance was evaluated using holding times, internal standard recoveries, and surrogate recoveries. Overall method compliance was acceptable.

Completeness:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Completeness is a percentage expression of the ratio of total acceptable data points to the total possible data points. No data points were rejected; all data are usable with some usable with qualification. For the sample data validated, no data points were rejected. The data set was 100% complete.

ERM Analytical Data Validation Checklist (Continued)

EVALUATION CRITERIA CHECK						
Data validation flags used in this review only include those used by the laboratory: BRL Below Reporting Limit. Indicates the analyte was analyzed for but not detected. H Sample was prepped or analyzed beyond the specified hold time **Only bolded comments required qualification.** The other comments are of interest, but qualification of the results was not necessary.						
1. Did the laboratory identify any nonconformances related to	**X**	Yes		No	TN	Initials
Explanation: The laboratory identified the following nonconformance in the case narratives for the samples validated. Samples 1501895-006B, -009B; 1501A32-004A, -005A, -008A; 1501A32-014C; 1501B40-003A, -004A; 1501N94-002A and -004A required dilution during preparation and/or analysis resulting in elevated reporting limits. Samples for Dissolved Oxygen were received and analyzed outside holding time of "immediate or 15 minutes." Duplicate samples were analyzed with an H-Flag due to no collection times listed on COCs (withholding collection times was intentional). For all Method 3500Fe-B applicable for analyzing Ferrous Iron in the field: samples requiring Ferrous Iron were analyzed in the laboratory which is a deviation from the standard field anaysis method.						
2. Were samples Chain-of Custody (COC) forms complete?	**X**	Yes		No	TN	Initials
Comments: An extra set of Trip Blank VOA bottles were received along with the samples collected on 7/16/2014; these bottles were not listed on the COC. Sample containers were not received for MNA analysis for samples "MW-307BR-20150115-01 and DUP-4-20150115-01. Methane analysis was not listed on the COC but was reported per project requirements for samples 1501N94-003, -007, and -008.						
3. Were all the analyses requested for the samples on the COCs completed by the laboratory?	**X**	Yes		No	TN	Initials
Comments: All requested COC analyses were completed by the laboratory except for TB-02 canceled by ERM on 1/16/2015. Methane analysis was not on the COC but was reported for samples 1501N94-003, -007, and -008. Sample "MW-319-20150115-01" was not analyzed for MS/MSD per ERM on 1/20/15.						
4. Were samples received in good condition and at appropriate temperature?	**X**	Yes		No	TN	Initials
Comments: Samples were received in good condition and temperatures ranging from 3.1 to 3.9 degrees C.						
5. Were the requested analytical methods in compliance with WP/QAPP, permit, or COC?	**X**	Yes		No	TN	Initials
Comments: Requested analytical methods were in compliance with COC forms. Additionally, the test results in the validated report meet all NELAP requirements for parameters for which accreditation is required or available.						
6. Were detection limits in accordance with WP/QAPP, permit, or method?	**X**	Yes		No	TN	Initials
Comments: Results were reported down to the practical quantitation limits.						
7. Do the laboratory reports include only those constituents requested to be reported for a specific analytical method?	**X**	Yes		No	TN	Initials
Comments: The laboratory reported the requested constituents.						

ERM Analytical Data Validation Checklist (Continued)

8. Were the sample holding times met?		Yes	**X**	No	TN	Initials
Comments: Dissolved oxygen (DO) by Method 360.1. This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. Certain samples for ferrous iron were analyzed outside of the specified 24 hour hold time by Standard Method SM 3500.						
9. Were correct concentration units reported?	**X**	Yes		No	TN	Initials
Comments: Organic results were reported in µg/L. ICP metals and general chemistry results were reported in mg/L.						
10. Were the reporting requirements for flagged data met?	**X**	Yes		No	TN	Initials
Comments: The reporting requirements for flagged data were met. Data validation qualifiers supersede laboratory flags.						
11. Were laboratory blank samples free of target analyte contamination?	**X**	Yes		No	TN	Initials
Comments: The lab blanks were free of target analyte contamination						
12. Were trip blank, field blank, and/or equipment blanks free of target analytes	**X**	Yes		No	TN	Initials
Comments: Trip blanks were free of target analytes.						
13. Were instrument calibrations within method control limits?	**X**	Yes		No	TN	Initials
Comments: Initial and continuing calibrations were within required method criteria for the target analytes.						
14. Were surrogate recoveries within control limits?	**X**	Yes		No	TN	Initials
Comments: All surrogate recoveries were within laboratory QC limits.						
15. Were laboratory control sample recoveries within control limits?	**X**	Yes		No	TN	Initials
Comments: All LCS recoveries outside control limits are listed in question 1 - the data have been reported and qualified.						
16. Were matrix spike recoveries within control limits?	**X**	Yes		No	TN	Initials
Comments: All of the MS/MSD and matrix interference checks were within the laboratory QC/advisory limits for all target compounds except for those listed in question 1.						
17. Were duplicate RPDs and/or serial dilution %Ds within control limits?		Yes	**X**	No	TN	Initials
Comments: RPDs for MS/MSDs, laboratory duplicate samples and LCS/LCSDs met QC criteria for all target compounds/analytes for the samples validated except where noted for sample MW-12-20150114-01.						
18. Were organic system performance criteria met?	**X**	Yes		No	TN	Initials
Comments: All GC/MS internal standards were within method criteria for the samples validated.						
19. Were internal standards within method criteria for GS/MS sample analyses?	**X**	Yes		No	TN	Initials
Comments: All GC/MS internal standards were within method criteria for the samples validated.						
20. Were inorganic system performance criteria met?	**X**	Yes		No	TN	Initials
Comments: Inorganic system performance criteria were met.						

ERM Analytical Data Validation Checklist (Continued)

21. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.		**X**	Yes		No	TN	Initials
Duplicate Sample No.	DUP-01-20150113-01	Primary Sample No.		MW-306TZ-20150113-01			
Duplicate Sample No.	DUP-02-20150113-01	Primary Sample No.		MW-315-20150113-01			
Duplicate Sample No.	DUP-03-20150114-01	Primary Sample No.		MW-12-20150114-01			
Duplicate Sample No.	DUP-4-20150115-01	Primary Sample No.		MW-307BR-20150115-01			
Duplicate Sample No.	DUP-05-20150129-01	Primary Sample No.		MW-308BR-20150129-01			
Duplicate Sample No.	DUP-06-20150129-01	Primary Sample No.		MW-401SAP-20150129-01			
Comments: Results for primary and field duplicate samples were nondetect for those constituent pairs with an NC in the RPD column in the following tables. RPD's greater than 30% are highlighted because this variation is greater than the advisory limit.							
22. Were qualitative criteria for organic target analyte identification met?		**X**	Yes		No	TN	Initials
Comments: All qualitative criteria for organic target analyte identification were met.							
23. Were 100% of the EDD concentrations and reporting limits compared to the hardcopy data reports?		**X**	Yes		No	TN	Initials

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-01-20150113-01		MW-306TZ-20150113-01		RPD(%)
Acenaphthene	21	µg/L	18	µg/L	15
Anthracene	0.25	µg/L	0.25	µg/L	0
Fluoranthene	0.13	µg/L	0.12	µg/L	8
Fluorene	2.2	µg/L	2	µg/L	10
Naphthalene	300	µg/L	240	µg/L	22
Phenanthrene	1.1	µg/L	0.95	µg/L	15
Pyrene	0.12	µg/L	0.11	µg/L	9
Barium	0.741	mg/L	0.735	mg/L	1
Xylenes	6.3	µg/L	6.8	µg/L	8

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-02-20150113-01		MW-315-20150113-01		RPD(%)
Carbon dioxide	69.2	mg/L	77.9	mg/L	12
Iron, as Ferrous (Fe+2)	6.53	mg/L	6.36	mg/L	3
Oxygen	7.01	mg/L	7.68	mg/L	9
Methane	57	µg/L	60	µg/L	5
Barium	0.459	mg/L	0.455	mg/L	1
Acenaphthene	0.65	µg/L	0.56	µg/L	15
Sulfate	4.9	mg/L	5.5	mg/L	12

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-03-20150114-01		MW-12-20150114-01		RPD(%)
Carbon dioxide	259	mg/L	251	mg/L	3
Iron, as Ferrous (Fe+2)	7.79	mg/L	6.66	mg/L	16
Oxygen	**5.98**	**mg/L**	**3.02**	**mg/L**	**66**
Methane	3700	µg/L	3000	µg/L	21
Barium	0.236	mg/L	0.231	mg/L	2
Benzene	3600	µg/L	3500	µg/L	3
Ethylbenzene	990	µg/L	930	µg/L	6
Toluene	740	µg/L	720	µg/L	3
Xylenes	980	µg/L	940	µg/L	4
Acenaphthene	73	µg/L	69	µg/L	6
Acenaphthylene	**3.3**	**µg/L**	**1.7**	**µg/L**	**64**
Anthracene	1.9	µg/L	1.5	µg/L	24
Fluoranthene	0.35	µg/L	0.26	µg/L	30
Fluorene	23	µg/L	18	µg/L	24
Naphthalene	4900	µg/L	3700	µg/L	28
Phenanthrene	14	µg/L	11	µg/L	24
Pyrene	**0.32**	**µg/L**	**0.23**	**µg/L**	**33**

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-4-20150115-01		MW-307BR-20150115-01		RPD(%)
Barium	0.826	mg/L	0.804	mg/L	3
Zinc	0.0802	mg/L	0.0746	mg/L	7
Benzene	12000	µg/L	12000	µg/L	0
Ethylbenzene	2100	µg/L	2000	µg/L	5
Xylenes	770	µg/L	720	µg/L	7
Acenaphthene	220	µg/L	220	µg/L	0
Anthracene	6.6	µg/L	7.2	µg/L	9
Benzo(a)anthracene	0.15	µg/L	0.2	µg/L	29
Chrysene	0.11	µg/L	0.13	µg/L	17
Fluoranthene	3.1	µg/L	3.5	µg/L	12
Fluorene	46	µg/L	48	µg/L	4
Naphthalene	8100	µg/L	6700	µg/L	19
Phenanthrene	44	µg/L	46	µg/L	4
Pyrene	3.6	µg/L	4.1	µg/L	13

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-05-20150129-01		MW-308BR-20150129-01		RPD(%)
					NC
Barium	1.15	mg/L	1.11	mg/L	4
Zinc	0.0508	mg/L	0.0472	mg/L	7
Benzene	6100	µg/L	6600	µg/L	8
Ethylbenzene	720	µg/L	810	µg/L	12
Toluene	1900	µg/L	2100	µg/L	10
Xylenes	740	µg/L	880	µg/L	17
Acenaphthene	46	µg/L	46	µg/L	0
Acenaphthylene	63	µg/L	66	µg/L	5
Anthracene	7.5	µg/L	7	µg/L	7
Benzo(a)anthracene	9.9	µg/L	9.6	µg/L	3
Benzo(a)pyrene	11	µg/L	11	µg/L	0
Benzo(b)fluoranthene	10	µg/L	10	µg/L	0
Benzo(g,h,i)perylene	6.2	µg/L	5.9	µg/L	5
Benzo(k)fluoranthene	3.2	µg/L	3.3	µg/L	3
Chrysene	8.3	µg/L	7.8	µg/L	6
Dibenzo(a,h)anthracene	1.2	µg/L	1.1	µg/L	9
Fluoranthene	12	µg/L	12	µg/L	0
Fluorene	21	µg/L	22	µg/L	5
Indeno(1,2,3-cd)pyrene	4.9	µg/L	4.8	µg/L	2
Naphthalene	3200	µg/L	3400	µg/L	6
Phenanthrene	29	µg/L	28	µg/L	4
Pyrene	19	µg/L	17	µg/L	11

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-06-20150129-01		MW-401SAP-20150129-01		RPD(%)
Carbon dioxide	60.4	mg/L	65.5	mg/L	8
Oxygen	8.45	mg/L	8.44	mg/L	0
Barium	0.0566	mg/L	0.0576	mg/L	2
Mercury	0.00034	mg/L	0.00036	mg/L	6
Trichloroethene	20	µg/L	19	µg/L	5
Nitrate as N	2.4	mg/L	2.6	mg/L	8
Sulfate	41	mg/L	43	mg/L	5

Summary of Historical Groundwater Sampling Data – Alluvium, Galliard, and Saprolite Monitoring Wells

Appendix E1

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-05																													
			7/14/2014	1/6/2014	7/8/2013	1/7/2013	7/23/2012	1/16/2012	7/5/2011	1/17/2011	7/13/2010	1/5/2010	01/10 DUP	1/13/2009	7/15/2008	1/9/2008	7/10/2007	2/14/2007	7/11/2006	1/10/2006	7/21/2005	1/18/2005	7/16/2004	1/22/2004	7/19/2003	1/20/2003	7/9/2002	1/17/2002	7/11/2001	07/01 DUP	1/18/2001
			Post-ISCO																		Pre-ISCO											
Field Parameters																																
Conductivity	*	mS/cm	0.742	0.646	0.695	0.742	0.048	0.660	0.750	0.370	0.674	0.653	0.653	1.230	0.792	0.816	0.631	0.893	0.830	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.69	2.04	0.08	0.16	0.18	3.14	2.06	5.5	0.31	0.13	0.13	5.82	0.21	0.36	0.22	0.71	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-15.0	-67.0	-18.9	-58.0	-34.8	175.0	-55.7	65.0	-47.2	-36.8	-36.8	-35.8	-45.4	-51.9	-16.4	-67.5	-76.2	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.14	6.32	6.91	6.03	5.92	2.30	5.68	0.586	5.82	6.08	6.08	0.804	5.94	6.11	5.96	5.96	6.11	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	24.8	17.72	22.93	22.16	24.77	19.27	25.26	17.65	25.55	19.18	19.18	18.27	24.68	20.8	22.81	17.05	24.95	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.57	3.34	1.52	4.44	3.13	3.98	7.69	NA	3.09	3.94	3.94	2.4	3.12	1.09	3.88	1.03	3.41	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30.8	31	32	38	33	29	33	33	33	37	36	36
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	1.95	2	2.2	2.2	2	2.1	2.2	2.3 N	2.2 N	2.2 N	2.1
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	< 50	**58**	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	**230**	**29**	**32**	< 25
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.72 J**	< 1.0	< 1.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.12 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.5 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	**0.60 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.24 J**	< 1.0	< 1.0
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	<0.19	< 0.19	<0.19	**0.027 J**	**0.023 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.050	<0.050	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.050	**0.090**	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.10	<0.10	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.043	< 0.047	< 0.055	< 0.047	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.050	<0.050	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	**0.14**	**0.20**	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	**0.14**	**0.21**	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.21	< 0.097	< 0.11	**0.22 J**	**0.13 J**	<0.19	<0.19	<0.19	**0.038 J**	**0.090 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	<0.19	<0.19	<0.19	**0.048 J**	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	<0.19	<0.19	<0.19	**0.034 J**	**0.034 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	**0.21**	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	**3.3**	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	**0.072 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	**0.0071 J**	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.020	< 0.02	< 0.02	< 0.01	< 0.006	< 0.02	**0.011**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0057 B**
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	**0.0082 J**	**0.022**	< 0.0046	<0.020	<0.020	<0.020	**0.0069 J**	< 0.010	<0.0500	<0.050	< 0.05	< 0.05	< 0.01	< 0.01	< 0.01	**0.017**	< 0.01	< 0.01	**0.0034 B**	< 0.01	**0.0048 B**	< 0.01	**0.0051 B**	< 0.01
Barium	2	mg/L	**0.349**	**0.366**	**0.368**	**0.33**	**0.39**	**0.36**	**0.38**	**0.36**	**0.34**	**0.36**	**0.36**	**0.37**	**0.37**	**0.343**	**0.363**	**0.366**	**0.337**	**0.366**	**0.403**	**0.38**	**0.41**	**0.39**	**0.4**	**0.39**	**0.39**	**0.41**	**0.39**	**0.4**	**0.4**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	**0.00028 J**	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.005	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	**0.00083 B**	**0.00059 B**	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00094 B**
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**53.5**	**53.6**	**57**	**58**	**64**	**56**	**60**	**60**	**63**	**61**	**62**	**61**	
Chromium	0.1	mg/L	< 0.0100	<0.0100	< 0.0100	<0.010	< 0.0012	**0.0013 J**	**0.0051 J**	**0.0018 J**	<0.010	<0.010	<0.010	**0.0018 J**	< 0.010	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01N	< 0.01N	< 0.01
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.007	< 0.01	< 0.01	**0.019**	< 0.01	< 0.01	**0.002 B**	**0.0021 J**	**0.0017 B**	**0.0018 B**	**0.0023 B**	**0.0017 B**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	**0.0040 J**	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0016 B**	< 0.02	< 0.02	< 0.02N	< 0.02N	**0.00096 B**	
Cyanide	0.2	mg/L	0.02	<0.0100	**0.012**	**0.014**	**0.013**	**0.0098 J**	**0.031**	**0.012**	**0.0080 J**	**0.013**	**0.014**	**0.012**	**0.0079 J**	< 0.010	< 0.010	**0.005**	< 0.01	< 0.01	< 0.01	< 0.01	**0.011**	< 0.01	< 0.01	< 0.015	**0.01**	< 0.01	**0.0098 B**	**0.014**	**0.0095 B**	**0.0059 B**
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	<0.010	< 0.0040	< 0.0040	**0.0051 J**	< 0.0040	<0.010	<0.010	<0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0018	< 0.005	< 0.005	**0.0018 B**	< 0.005
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.5**	**21.1**	**23**	**23**	**25**	**25**	**23**	**24**	**24**	**23**	**24**	**22**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	**0.00012 B**	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	**0.015 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.020	< 0.02	< 0.02	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**10.7**	**9.54**	**11**	**14**	**13**	**11**	**11**	**7.6**	**8.8 N**	**17**	**14**	**8.6**	
Selenium	0.05	mg/L	< 0.0200	<0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.020	< 0.02	< 0.02	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	**0.02**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**43.9**	**47.4**	**48**	**49**	**24**	**41**	**46**	**39**	**38**	**44**	**43**	**41**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.001	< 0.001	< 0.001	< 0.001	**0.035**	< 0.001	< 0.001	< 0.002	< 0.002WN	< 0.002 J	< 0.002	< 0.002	< 0.002	< 0.002	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	**0.0075 J**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.007	< 0.01	< 0.01	**0.01**	< 0.01	< 0.01	< 0.01	< 0.01	**0.0025 B**	< 0.01	< 0.01	< 0.01	
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.0242**	< 0.020	< 0.0087	**0.027**	**0.51**	**0.037**	< 0.020	**0.12**	**0.1**	**0.045**	< 0.020	< 0.0200	**0.146**	< 0.02	< 0.02	< 0.02	**0.02**	< 0.02	**0.5**	< 0.02	**0.03**	**0.025**	< 0.02	**0.012 B**	< 0.02	**0.016 B**	**0.024**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
< - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-12																												
		Sample Date	1/14/2015	01/15 DUP	7/14/2014	07/14 DUP	1/8/2014	01/14 DUP	7/10/2013	07/13 DUP	1/9/2013	1/13 DUP	7/25/2012	07/12 DUP	1/18/2012	01/12 DUP	07/11 DUP	7/5/2011	01/11 DUP	1/18/2011	07/10 DUP	7/14/2010	1/6/2010	01/10 DUP	7/23/2009	7/22/2008	07/22 DUP	1/8/2008	01/08 DUP	7/10/2007	07/07 DUP	2/14/2007
		Unit	Post-ISCO																												
Field Parameters																															
Conductivity	*	mS/cm	0.252	0.252	0.199	0.199	0.197	0.197	0.237	0.237	0.390	0.390	0.430	0.430	0.364	0.364	0.421	0.421	0.280	0.280	0.475	0.475	0.389	0.389	0.747	0.768	0.768	0.888	0.888	0.692	0.692	0.567
Dissolved Oxygen (YSI)	*	mg/L	0.33	0.33	0.14	0.14	0.64	0.64	0.98	0.98	0.42	0.42	0.68	0.68	1.74	1.74	0.49	0.49	5.41	5.41	0.3	0.3	3.41	3.41	5.54	1.05	1.05	0.87	0.87	1.44	1.44	0.27
Oxidation Reduction Potential	*	mV	-11.2	-11.2	-96.3	-96.3	-16.7	-16.7	-96.0	-96.0	32.6	32.6	-22.0	-22.0	-22.0	-22.0	-22.2	-22.2	93	93	-81.8	-81.8	-48.9	-48.9	-256.1	-165.4	-165.4	-156.6	-156.6	-31.8	-31.8	-112.5
pH	*	SU	5.46	5.46	5.83	5.83	5.86	5.86	5.72	5.72	5.94	5.94	6.04	6.04	6.33	6.33	6.17	6.17	0.284	0.284	6.13	6.13	6.92	6.92	6.69	6.35	6.35	5.76	5.76	6.47	6.47	5.51
Temperature	*	Celsius	12.40	12.40	21.61	21.61	18.28	18.28	20.20	20.20	14.85	14.85	22.04	22.04	19.31	19.31	21.65	21.65	18.71	18.71	22.36	22.37	15.24	15.24	24.37	22.56	22.56	20.63	20.63	21.93	21.93	19.13
Turbidity	*	NTU	1.47	1.47	0.38	0.38	0.56	0.56	0.86	0.86	0.61	0.61	5.45	5.45	0.79	0.79	4.88	4.88	9	9	3.97	3.97	2.13	2.13	76.6	18.9	18.9	4.49	4.49	41.4	41.4	0.50
Monitored Natural Attenuation Parameters																															
Carbon Dioxide	*	µg/L	251	259	176	162	258	257	173	171	210	230	230	220	2,900 B	2,500 B	2,300 * B	2,200 * B	1,900	2,300	1,600 JB	1,600 JB	1,200	1,300	740	2,000	1,900	< 1,000	< 1,000	< 1,000	< 1,000	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	6.66	7.79 H	4.08	4.21	11	4.25 H	2.92	2.77 H	5.8 HF	5.7 HF	7.7 HF	7.8 HF	5.9 HF	7.7 HF	5.4 HF	4.9 HF	6.4 HF	6.2 HF	7.0 HF	6.3 HF	3.9 HF	4.0 HF	< 0.10 HF	3.9	4.2	29.2	30.0	22.5	20.9	30.2
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	3,000	3,700	3,200	2,900	2,000	1,800	1,600	1,400	1,300	770	630	740	720	1,100	980	910	510	1,100	1,300	1,500	560	710	930	1600	990	2,000	2,100	1,100	1,300	1,500
Nitrate	*	mg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.075	< 0.075	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.50	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	3.02 H	5.98 H	5.76 H	5.01 H	7.10 H	7.09 H	4.71 H	5.76 H	4.6	4.8	4.5	3.9	0.9	1.0	1.4	1.4	1.4	1.1	1.3	1.3	1.3	1.3	1.1	1.1	0.92	0.81	1.0	2.0	1.8	0.83
Sulfate	*	mg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.6	1.5	31	31	33	34	19	32	9.5	8.4	9.8	9.9	5.1	6.2	8.5	11	40	68	69	210	220	130	120	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	170
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 1,000	< 1,000	< 50	< 50	< 50	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 50	< 25	< 100	< 25	**190 J**	**11 J**	< 5,000	< 5,000	< 5,000	< 1,000	< 2,000	< 50	< 50	< 2,500	< 2,500	**120**
Benzene	5	µg/L	**3,500**	**3,600**	**5,700**	**5,500**	**2,200**	**2,200**	**1,900**	**1,900**	**220**	**120**	**73**	**69**	**100**	**71**	**590**	**210**	**410**	**540**	**2,300**	**1,800**	**3,500**	**3,600**	**3,600**	**1,800**	**1,800**	**2,000**	**2,100**	**7,500**	**7,200**	**9,900**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 0.60	< 6.0	< 3.0	< 12	< 3.0	< 100	< 5.0	< 250	< 250	< 250	< 50	< 100	< 5.0	< 5.0	< 5	< 250	< 5
Ethylbenzene	700	µg/L	**930**	**990**	**1,700**	**1,600**	**720**	**680**	**540**	**530**	**93**	**52**	**39**	**34**	**120**	**76**	**240**	**130**	**190**	**280**	**600**	**470**	**730**	**760**	**470**	**440**	**390**	**290**	**270**	**530**	**500**	**1,000**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 10	< 5.0	< 20	< 5.0	< 100	< 5.0	< 250	< 250	< 250	< 50	< 100	< 5.0	< 5.0	< 5	**940**	< 5
Toluene	1,000	µg/L	**720**	**740**	**660**	**680**	**330**	**330**	**160**	**200**	< 5.0	< 5.0	< 5.0	< 5.0	< 3.3	**0.90 J**	**5.9 J**	**2.9 J**	**7.9 J**	**8.3 J**	**25 J**	**24**	< 250	< 250	**370**	**3.8 J**	< 100	**39**	**40**	**340**	**320**	**2,000**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.13	< 1.3	< 0.65	< 2.6	< 0.65	< 100	< 5.0	< 250	< 250	< 250	< 50	< 100	< 5.0	< 5.0	< 5	< 250	< 5
Xylenes, total	2,000	µg/L	**940**	**980**	**1,300**	**1,300**	**530**	**520**	**350**	**330**	**8.2**	**6.4**	< 5.0	< 5.0	< 2.0	**3.3 J**	**30 J**	**20 J**	**52 J**	**70**	**280**	**270**	**450**	**470**	**410**	**48 J**	**48 J**	**110**	**120**	**400**	**370**	**1,100**
Semivolatile Organic Compounds																															
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	2,000	µg/L	**69**	**73**	**110**	**120**	**71**	**68**	**23**	**25**	< 22	< 22	**33**	**20**	**32**	**52**	**21**	**22**	**28**	**24**	< 94	< 190	<100	<100	< 3.8	**27**	**44**	**31**	**28**	**26**	**25**	**31**
Acenaphthylene	10	µg/L	**1.7**	**3.3**	**20**	**21**	**10.0**	**12.0**	**1.0**	**1.0**	< 22	< 22	< 9.5	< 9.5	**1.8**	**4.8**	**2.4**	**2.8**	**5.8**	**5.2**	< 94	< 190	<100	<100	< 3.8	**1.0 J**	< 3.9	< 10	< 10	< 10	< 10	**11**
Anthracene	10	µg/L	**1.5**	**1.9**	**2.4**	**2.6**	**1.7**	**1.8**	**0.74**	**0.73**	< 22	< 22	< 9.5	< 9.5	**0.83**	**1.0 J**	< 1.1	< 1.1	**1.2 J**	< 0.99	< 94	< 190	<100	<100	< 3.8	**0.84 J**	**1.1 J**	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	**0.060**	< 0.050	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	**0.17 J**	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	< 0.05	**0.21**	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.10	< 0.10	< 0.1	**0.23**	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.044	< 0.45	< 0.48	< 0.48	< 0.43	< 0.44	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	< 0.05	< 0.050	< 0.05
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.10	< 0.10	< 0.1	**0.63**	< 0.1
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	1,000	µg/L	**0.26**	**0.35**	**0.56**	**0.58**	**0.28**	**0.32**	**0.16**	**0.16**	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**18**	**23**	**29**	**33**	**19**	**19**	**8.1**	**7.9**	< 22	< 22	< 9.5	< 9.5	**7.3**	**19**	**8.7**	**8.8**	**12**	**11**	< 94	< 190	<100	<100	< 3.8	**8.6**	**14**	**12**	**11**	**20**	**17**	**16**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	< 0.05	**0.53**	< 0.05
Naphthalene	20	µg/L	**3.700**	**4.900**	**5.700**	**6.200**	**3.800**	**3.300**	< n.so	< n.so	**480**	**450**	**880**	**520**	**630**	**3.300**	**950**	**690**	**1.500**	**1.300**	**2.800**	**3.000**	**3.100**	**2.200**	**340**	**2.000**	**2.500**	**2.100**	**2.400**	**4.200**	**4.500**	**3.100**
Phenanthrene	10	µg/L	**11**	**14**	**21**	**23**	**14**	**14**	**3.8**	**3.3**	< 22	< 22	< 9.5	< 9.5	**5.1**	**12**	**4.8**	**3.6**	**6.9**	**5.6**	< 94	< 190	<100	<100	< 3.8	**6.5**	**10**	**10**	< 10	**15**	**14**	**16**
Pyrene	1,000	µg/L	**0.23**	**0.32**	**0.44**	**0.47**	**0.27**	**0.3**	**0.13**	**0.15**	< 22	< 22	< 9.5	< 9.5	**0.11 J**	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 94	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.020	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	<0.0500	< 0.05	< 0.050	< 0.05
Barium	2	mg/L	**0.231**	**0.236**	**0.182**	**0.178**	**0.212**	**0.213**	**0.225**	**0.221**	**0.32**	**0.32**	**0.44**	**0.44**	**0.39**	**0.44**	**0.41**	**0.35**	**0.27**	**0.28**	**0.31**	**0.30**	**0.23**	**0.22**	**0.30**	**0.54**	**0.55**	**0.354**	**0.394**	**0.170**	**0.177**	**0.149**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00096 J**	**0.0014 J**	**0.00079 J**	**0.0011 J**	**0.0015 J**	**0.0013 J**	**0.00056 J**	**0.00055 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0133**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.005
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0012 J**	**0.0032 J**	**0.0023 J**	**0.0039 J**	**0.0025 J**	**0.0026 J**	**0.0014 J**	**0.0014 J**	<0.010	<0.010	**0.015**	**0.0039 J**	0.0033	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0136**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.01
Cyanide	0.2	mg/L	< 0.010	**0.012**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.011**	**0.019**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.0076	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	--	--	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.01
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	--	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	**0.0028 J**	< 0.0023	**0.0024 J**	**0.0033 J**	< 0.040	< 0.040	< 0.040	< 0.040	**0.09**	**0.0110 J**	0.011	**0.0787**	**0.0931**	**0.309**	**0.345**	**0.0349**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.02	< 0.020	< 0.02
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0033 J**	0.0023	< 1.00	< 1.00	< 1.00	< 1.00	< 0.001
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0200	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	**0.0030 J**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.0100	< 0.0100	**0.0132**	**0.0122**	< 0.01
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.020	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-12 (continued)														MW-17	
		Sample Date	7/13/2006	2/8/2006	1/16/2006	7/21/2005	1/19/2005	7/16/2004	7/17/2003	1/20/2003	7/9/2002	1/17/2002	1/02 DUP	7/17/2001	1/17/2001	1/01 DUP	10/4/2006	10/06 (RA)
		Unit	Post-ISCO			Pre-ISCO											Post-ISCO	
Field Parameters																		
Conductivity	*	mS/cm	0.836	--	--	--	--	--	--	--	--	--	--	--	--	--	0.527	--
Dissolved Oxygen (YSI)	*	mg/L	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	1.15	--
Oxidation Reduction Potential	*	mV	-79.6	--	--	--	--	--	--	--	--	--	--	--	--	--	130.1	--
pH	*	SU	5.19	--	--	--	--	--	--	--	--	--	--	--	--	--	5.94	--
Temperature	*	Celsius	22.79	--	--	--	--	--	--	--	--	--	--	--	--	--	21.08	--
Turbidity	*	NTU	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	3.54	--
Monitored Natural Attenuation Parameters																		
Carbon Dioxide	*	µg/L	480	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	47.2	--	66.2	76.5	4.4	4.7	4.4	3.4	4.1	4.3	4.2	3.9	4.5	4.8	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	49.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	2.28	--	3.55	6.28	1.8	2.1	1.6	1.6	1.8	1.8 N	1.8 N	1.7	1.7	1.7	--	--
Manganese, Dissolved	*	mg/L	2.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	1,300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	9.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	0.5 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																		
Acetone	4,000	µg/L	**2,400**	--	3,300 U	1,200 U	25,000 U	25,000 U	5,000 U	5,000 U	5,000 U	5,000 U	12,000 U	1,200 U	5,000 U	5,000 U	50 U	--
Benzene	5	µg/L	**9,700**	--	**8,800**	**13,000**	**53,000**	**59,000**	**66,000**	**68,000 D**	**57,000 D**	**53,000 D**	--	**69,000 D**	**66,000 D**	**65,000 D**	5 U	--
Carbon Disulfide	4,000	µg/L	**20**	--	330 U	50 U	1,000 U	1,000 U	200 U	200 U	200 U	200 U	500 U	50 U	200,000 U	200,000 U	5 U	--
Ethylbenzene	700	µg/L	**630**	--	**700**	**1,500**	**4,600**	**4,400**	**5,200**	**4,800**	**4,200**	**5,200**	**5,700**	**6,000**	**6,400**	**6,200**	5 U	--
Methylene Chloride	5	µg/L	5 U	--	330 U	250 U	5,000 U	5,000 U	1,000 U	1,000 U	1,000 U	1,000 U	2,500 U	250 U	**68 JB**	**130 JB**	5 U	--
Toluene	1,000	µg/L	**2,900**	--	**1,900**	**4,000**	**18,000**	**19,000**	**21,000**	**14,000**	**13,000**	**14,000**	**15,000**	**21,000 D**	**18,000**	**17,000**	5 U	--
Trichloroethylene	5	µg/L	5 U	--	330 U	50 U	1,000 U	1,000 U	200 U	**38 J**	200 U	200 U	500 U	50 U	200 U	200 U	5 U	--
Xylenes, total	2,000	µg/L	**770**	--	670 U	**1,500**	**5,200**	**4,400**	**4,600**	**3,700 B**	**3,300**	**4,300**	**4,800**	**5,900**	**5,700**	**5,500**	5 U	--
Semivolatile Organic Compounds																		
2-Methylnaphthalene	*	µg/L	--	--	**270**	**260**	**470**	**380**	**510 J M**	**550 D**	**540**	**500**	**490**	**710**	**600**	**670**	--	--
Acenaphthene	2,000	µg/L	**22**	--	**44**	10 U	10 U	200 U	**88**	**99**	**100**	**92 J**	**90 J**	**110**	**100**	**110**	10 U	--
Acenaphthylene	10	µg/L	10 U	--	**22**	**26**	10 U	200 U	**89**	**64**	**67 J**	10 U	0.2 U	**110**	**88**	**98**	10 U	--
Anthracene	10	µg/L	10 U	--	**10**	10 U	10 U	200 U	10 U	**2.0 J**	10 U	10 U	0.2 U	**2.2 J**	50 U	**2.7 J**	10 U	--
Benz(a)anthracene	0.1	µg/L	0.05 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	**4.8 J**	**0.17 R**	0.05 UJ
Benzo(a)pyrene	0.2	µg/L	0.05 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	**0.23 R**	0.05 UJ
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	**0.25 R**	0.1 UJ
Benzo(g,h,i)perylene	10	µg/L	10 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	**5.7 J**	**4.8 J**	10 U	--
Benzo(k)fluoranthene	10	µg/L	10 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	10 U	--
Chrysene	0.2	µg/L	0.05 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	**4.3 J**	**4.2 J**	**0.15 R**	0.05 UJ
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	**5.2 J**	**0.32 R**	0.1 UJ
Dibenzofuran	1	µg/L	--	--	50 U	10 U	10 U	200 U	10 U	**6.0 J**	**6.2 J**	**5.3 J**	0.2 U	**7.2 J**	**6.5 J**	**7.5 J**	--	--
Fluoranthene	1,000	µg/L	10 U	0.0008 U	**16**	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	10 U	--
Fluorene	1,000	µg/L	**17**	--	**31**	**12**	10 U	200 U	**24**	**23**	**22 J**	10 U	0.2 U	**29 J**	**28 J**	**30 J**	10 U	--
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	--	10,000 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	**0.31 R**	0.05 UJ
Naphthalene	20	µg/L	**2,900**	--	**2,000**	**2,300**	**6,700**	**5,900**	**12,000 J M**	**7,600 D**	**8,900 D**	**8,600 D**	**8,700 D**	**10,000 D**	**10,000 D**	**11,000 D**	10 U	--
Phenanthrene	10	µg/L	**18**	--	**47**	**12**	10 U	200 U	**17**	**16**	**18 J**	**15 J**	**15 J**	**19 J**	**20 J**	**22 J**	10 U	--
Pyrene	1,000	µg/L	10 U	0.0008 U	**14**	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	10 U	--
Inorganic Compounds																		
Aluminum (fume or dust)	*	mg/L	--	--	**1.81**	**1.75**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.043 BN**	0.2 U	0.2 U	--	--
Antimony	0.01	mg/L	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0052 B**	0.02 U	**0.0053 B**	**0.0052 B**	0.02 U	--
Arsenic	0.05	mg/L	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0039 B**	0.01 U	**0.0056 B**	0.01 U	0.01 U	0.05 U	--
Barium	2	mg/L	**0.0631**	--	0.2 U	**0.0699**	**0.69**	**0.7**	**0.64**	**0.63**	**0.65**	**0.67**	**0.66**	**0.64**	**0.64**	**0.62**	**0.0453**	**--**
Beryllium	0.004	mg/L	**0.0266**	--	**0.0318**	**0.0278**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00091 B**	**0.00089 B**	0.004 U	**0.0022 B**	**0.0022 B**	0.01 U	--
Cadmium	0.005	mg/L	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--
Calcium metal	*	mg/L	--	--	**74.7**	**132**	**50**	**57**	**44**	**47**	**50**	**50**	**50**	**47**	**45**	**46**	--	--
Chromium	0.1	mg/L	**0.0386**	--	**0.0692**	**0.219**	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.04**	0.01 U	--
Cobalt	*	mg/L	--	--	**0.579**	**0.537**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Copper	1.3	mg/L	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.01 U	--
Cyanide	0.2	mg/L	**0.011**	--	0.01 U	0.01 U	**0.049**	**0.055**	0.015 U	**0.038**	**0.051**	**0.05**	**0.039**	**0.06**	**0.023**	**0.024**	0.01 U	--
Lead	0.015	mg/L	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0032 B**	**0.0025 B**	0.01 U	--
Magnesium	*	mg/L	--	--	**52.1**	**87.5**	**40**	**45**	**40**	**38**	**40**	**41**	**41**	**38**	**37**	**37**	--	--
Mercury	0.002	mg/L	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	**0.00015 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	--
Nickel	0.1	mg/L	**0.146**	--	**0.262**	**0.063**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.017 B**	0.02 U	--
Potassium	*	mg/L	--	--	**7.09**	**6.45**	**1.9**	**1.9**	**2**	**1.8**	**1.8**	**2 N**	**2 N**	**1.8**	**2.0**	**2.0**	--	--
Selenium	0.05	mg/L	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0047 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	--
Sodium	*	mg/L	--	--	**24.3**	**27.3**	**34**	**37**	**36**	**33**	**32**	**31**	**31**	**32**	**30**	**30**	--	--
Thallium	0.002	mg/L	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.002 U	0.002 UWN	0.002 UJ	0.002 U	0.002 U	0.002 UN	0.002 U	0.002 U	0.001 U	--
Vanadium (fume or dust)	0.2	mg/L	**0.0174**	--	**0.0303**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--
Zinc	2	mg/L	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-19																													
		Sample Date	1/14/2015	7/17/2014	1/9/2014	7/10/13	1/9/2013	7/25/2012	1/19/2012	7/6/2011	1/18/2011	7/13/2010	1/11/2010	7/23/2009	1/13/2009	7/17/2008	1/10/2008	7/12/2007	2/13/2007	7/13/2006	2/8/2006	1/10/2006	7/20/2005	7/12/2004	2/10/2004	7/15/2003	1/17/2003	7/11/2002	1/21/2002	1/02 DUP	7/12/2001	1/17/2001
		Unit	Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.529	0.626	0.472	0.630	0.520	0.744	0.484	0.602	1.86	0.808	0.775	0.819	2.68	0.785	0.900	1.437	0.868	1.245	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.77	0.98	0.90	0.42	1.39	1.59	0.92	1.99	6.08	3.81	4.54	1.57	6.15	6.85	8.78	3.53	12.21	3.09	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	113.4	83.9	128.2	96.4	134.3	100	127.0	139.9	144.8	-130.1	19.2	70.1	84.7	124.1	226.7	162.3	203	148.2	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.84	6.26	6.34	6.18	6.18	6.14	6.12	5.68	0.662	8.68	9.22	5.82	7.65	6	5.85	6.16	6.21	6.25	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.00	25.86	17.37	23.71	20.66	29.00	21.48	24.68	18.46	25.71	15.62	24.07	17.55	23.83	20.26	22.75	19.81	21.96	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.55	0.42	9.12	5.36	9.45	3	8.3	52.4	117	8.5	9.85	8.12	3.46	3.24	3.68	12.3	3.11	29.8	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	236	198	272	251	110	120	1,300 B	1,200 * B	1,100	NA	910	880	1,200	1,000	< 1000	< 1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.14	--	1.9	1.08	0.56	0.16	0.04 U	0.15	0.11	0.74	0.71	0.044 B	0.12
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	0.17 HF	NA	0.82 HF	3.9 HF	0.80 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.107	--	0.133	0.0624	0.013	0.01 U	0.58	0.48	0.46	0.38	0.39	0.34	0.48
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0108	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	7	7	6	1.1	< 0.58	< 0.29	< 0.29	< 0.19	NA	0.31	< 0.19	0.23	0.12	0.11	7.8	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.7	0.93	0.47	<0.25	0.46	0.76	1.3	1.7	7.5	NA	7.9	8.7	2	9.7	3.9	2.3	4.3	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.50 H	6.23 H	5.38 H	6.51 H	5.9	5.3	1.6	1.6	1.4	NA	1.4	1.2	1.3	1.6	8.7	12	12	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	87	120	110	110	100	140	55	88	94	NA	210	120	170	120	190	490	180	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	**5.2 J**	< 50	< 50	**120**	50 U	--	10 U	25 U	25 U	25 U	25 U	25 U	25 U	**17 J**	**14 J**	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**9,900**	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**10**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	**20**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**1,000**	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.35 J**	5.0 U	5.0 U	5.0 U	**0.26 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**2,000**	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.49 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**9.4**	**3.0 J**	**1.8 J**	**1.7 J**	< 5.0	< 5.0	**3.1 J**	**7.0**	< 5.0	< 5	< 5	5 U	--	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**1,100**	5 U	--	2.0 U	2.0 U	2.0 U	**2.5**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	< 0.20	< 0.20	< 0.19	< 0.20	< 10	< 10	**31**	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.19	< 0.098	**0.21 J**	**0.18 J**	< 0.19	**0.38**	< 0.20	**0.026 J**	< 0.20	< 10	< 10	**11**	10 U	0.2 U	**0.26**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	**0.092**	**0.15**	**0.1**	**0.11**	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	**0.24**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	**0.10 J**	**0.28**	**0.28**	< 0.19	**0.33**	< 0.20	< 0.19	< 0.20	**0.070**	**0.11**	< 0.05	**0.37**	0.2 U	**0.29**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)ovrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	**0.13 J**	**0.35**	**0.41**	< 0.19	**0.46**	< 0.20	< 0.19	< 0.20	**0.19**	**0.13**	< 0.05	**0.19**	0.2 U	**3.3**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	**0.20**	**0.23 J**	**0.19 J**	< 0.19	**0.39**	< 0.20	< 0.19	< 0.20	**0.15**	**0.16**	< 0.1	**0.22**	0.2 U	**3.9**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	**0.24 J**	**0.27**	< 0.19	**0.4**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	0.2 U	**3.9**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	**0.25**	**0.26**	< 0.19	**0.35**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	**0.11 J**	**0.30**	**0.35**	< 0.19	**0.31**	< 0.20	< 0.19	< 0.20	**0.070**	**0.10**	< 0.05	**0.12**	0.2 U	**3.3**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	< 0.20	< 0.20	< 0.19	< 0.20	**0.18**	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	**0.34**	**0.40**	< 0.19	**0.41**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	0.2 U	**0.41**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.65 J**
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	< 0.20	< 0.20	< 0.19	< 0.20	< 10	< 10	**16**	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)ovrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	**0.20 J**	**0.23**	< 0.19	**0.33**	< 0.20	< 0.19	< 0.20	**0.24**	**0.080**	< 0.05	**0.12**	0.2 U	**0.29**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	< 0.50	< 0.20	**0.49**	**0.20**	< 0.12	**0.42**	< 0.19	**9.4**	**0.54**	**0.026 J**	< 0.20	< 10	< 10	**3,100**	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	**0.13 J**	**0.12 J**	< 0.19	**0.2**	< 0.20	< 0.19	**0.019 J**	< 10	< 10	**16**	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	**0.082**	< 0.050	< 0.050	< 0.20	< 0.19	**0.23**	**0.57**	**0.65**	<0.19	**0.56**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	**0.23**	**0.75**	**0.2**	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	**1.2 J**
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.52**	**1.29**	0.2 U	0.2 U	0.2 U	0.2 U	**0.07 B**	**0.83**	**0.78**	0.2 U	**0.098 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0073 B**
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	**0.0063 J**	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0824**	**0.0907**	**0.0935**	**0.123**	**0.12**	**0.098**	**0.036**	**0.076**	**0.025**	**0.021**	**0.027**	**0.023**	**0.022**	**0.019**	**0.0285**	**0.0330**	**0.149**	**0.0453**	--	0.2 U	**0.0568**	**0.056**	**0.054**	**0.06**	**0.067**	**0.068**	**0.067**	**0.068**	**0.069**	**0.073**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	**0.00021 J**	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	**0.0133**	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0019 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	**0.0091**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**123**	**95.7**	**34**	**33**	**33**	**53**	**51**	**42**	**43**	**55**	**52**
Chromium	0.1	mg/L	< 0.0100	**0.0127**	**0.0151**	< 0.0100	<0.010	**0.012**	**0.0088 J**	**0.26**	**0.015**	**0.012**	< 0.010	< 0.010	**0.0047 J**	**0.0069 J**	**0.0207**	**0.0257**	**0.0136**	**0.0668**	--	**0.0786**	**0.0277**	**0.098**	0.01 U	0.01 UJ	**0.0061 B**	**0.002 B**	**0.01**	**0.0093 B**	**0.0023 B**	**0.0035 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.011**	**0.0066 B**	**0.0038 B**	**0.0038 B**	**0.0047 B**	**0.0045 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0024 J**	**0.063**	**0.0026 J**	0.0021 J	<0.020	**0.021**	**0.0031 J**	**0.0023 J**	< 0.0100	< 0.010	< 0.010	**0.0157**	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0095 B**	**0.0042 B**	**0.0071 B**	**0.0068 B**	**0.0029 B**	**0.0015 B**
Cyanide	0.2	mg/L	0.02	**0.02**	< 0.010	**0.012**	**0.023**	**0.058**	**0.0096 J**	**0.029**	**0.014**	**0.02**	**0.033**	**0.013**	**0.0094 J**	**0.023**	**0.030**	< 0.010	< 0.010	**0.048**	--	**0.071**	**0.062**	**0.02**	**0.033**	**0.018**	**0.026**	**0.034**	**0.016**	**0.005 B**	**0.017**	**0.008 B**
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	**0.028**	< 0.0040	< 0.010 U	< 0.010	< 0.010	**0.0042 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	**0.0244**	--	**0.0241**	**0.0156**	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	**0.0086**	**0.0079**	0.005 U	**0.0037 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**61.7**	**48.2**	**20**	**18**	**20**	**23**	**23**	**21**	**21**	**24**	**24**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.0275**	**0.0432**	**0.0579**	**0.0568**	**0.073**	**0.073**	**0.023 J**	**0.066**	**0.032 J**	0.021 J	<0.040	**0.077**	**0.054**	**0.041**	**0.0546**	**0.0916**	**0.0349**	**0.0779**	--	**0.132**	**0.139**	**0.042**	0.04 U	**0.1**	**0.065**	**0.088**	**0.062**	**0.066**	**0.12**	**0.093**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.83**	**6.22**	**7.6**	**6.4**	**6.6**	**5.2**	**5**	**5.9**	**5.9**	**4.9**	**6.0**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0039 J**	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	--	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**84.1**	**78.9**	**69**	**69**	**66**	**74**	**73**	**59**	**59**	**72**	**72**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UWN	0.002 U	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	**0.016**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0023 B**	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.0747**	**0.0856**	**0.0985**	**0.142**	**0.12**	**0.14**	**0.030**	**0.11**	**0.042**	**0.044**	**0.052**	**0.065**	**0.055**	0.051	**0.0730**	**0.0907**	< 0.02	**0.111**	--	**0.133**	**0.197**	0.02 U	**0.046**	**0.07**	**0.055**	**0.035**	**0.041**	**0.04**	**0.034**	**0.037**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-21																																
			1/12/2015	7/15/2014	1/9/2014	7/11/2013	1/9/2013	7/24/2012	1/18/2012	7/5/2011	1/20/2011	7/14/2010	1/7/2010	7/23/2009	1/09 DUP	1/15/2009	7/21/2009	1/9/2008	1/08 DUP	07/21/2008	7/11/2007	2/13/2007	7/12/2006	1/10/2006	7/22/2005	1/18/2005	7/13/2004	1/24/2004	7/20/2003	7/03 DUP	1/16/2003	7/10/2002	1/21/2002	7/11/2001	1/18/2001
			Post-ISCO																						Pre-ISCO										
Field Parameters																																			
Conductivity	*	mS/cm	0.614	0.631	0.702	0.518	0.460	0.457	0.305	0.481	2.64	0.554	0.43	0.533	0.47	0.47	0.474	0.590	0.590	0.474	0.526	0.536	0.462	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.42	0.74	0.24	0.50	0.33	2.04	4.01	1.97	120.5	4.91	3.41	0.51	212.1	212.1	0.33	0.31	0.31	0.33	0.39	0.30	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	63.9	144	187.3	111.7	94.7	90	101.0	63.0	6.53	119.1	45.1	124.4	6.3	6.3	122.5	75.0	75.0	122.5	189.6	-28.2	58	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.06	6.39	6.36	6.08	6.32	6.23	6.58	6.52	0.511	6.59	7.03	6.3	0.501	0.501	6.26	6.39	6.39	6.26	6.30	6.42	6.32	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.3	25.21	17.32	25.09	23.10	30.0	20.62	29.44	19.87	28.19	18.22	26.58	21.84	21.84	27.94	22.96	22.96	27.94	25.72	22.37	23.78	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.97	2.14	0.32	1.04	1.79	1.0	0.69	2.69	0.85	3.12	0.65	3.31	1.34	1.34	2.29	0.32	0.32	2.29	0.57	0.13	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																			
Carbon Dioxide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.04 UJ	0.06	0.023 B	0.05 U	0.05 U	0.089	0.046 B
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.379	0.332	0.35	0.45	0.43	0.34	0.34	0.37	0.38	0.4	0.47 N	0.39
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																				
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 100	< 50	< 50	50 U	33 U	25 U	25 U	25 U	25 U	25 UR	25 UR	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	**0.39 J**	**0.49 J**	**0.36 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.0**	1.0 UR	1.0 U	1.0 U	**0.12 J**	**1.8 J**	**0.17 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UR	1.0 U	1.0 U	**0.77 J**	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UR	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UR	5.0 UR	5.0 U	**0.26 J**	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.92 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UR	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	**18**	**18**	**49**	**150**	**130**	**86**	**13**	**110**	**100**	**130**	**160**	**87**	**70**	**64**	**62**	**100**	**96**	**62**	**110**	< 5	**170**	**110**	**180**	**140**	**140**	**120**	1.0 UR	**0.14**	**43**	**39**	**36**	**37**	**30**
Xylenes, total	2,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.0**	2.0 UR	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**--**	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	**0.024 J**	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.19	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.044	< 0.048	< 0.050	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.19	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	**1.4**	<0.19	**0.52**	< 0.098	< 0.11	< 0.11	< 0.20	**1.8**	< 0.20	**0.048 J**	**0.43 B**	**0.075 J**	< 10	< 10	0.075 J	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11 *	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**--**	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.058 B**	0.2 U	0.2 U	0.2 U	**0.029 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	<0.0500	<0.0500	< 0.010	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0854**	**0.0847**	**0.084**	**0.0759**	**0.066**	**0.063**	**0.035**	**0.062**	**0.072**	**0.073**	**0.081**	**0.07**	**0.072**	**0.072**	**0.07**	**0.0783**	**0.0756**	**0.07**	**0.0609**	**0.0656**	**0.073**	0.2 U	**0.0589**	**0.069**	**0.07**	**0.072**	**0.06**	**0.05**	**0.065**	**0.066**	**0.066**	**0.063**	**0.061**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00028 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0040	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	**0.00057 B**	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**29.4**	**31.6**	**33**	**34**	**37**	**30**	**30**	**33**	**32**	**33**	**33**	**33**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.010**	< 0.010	**0.022**	< 0.0012	< 0.0012	**0.028**	**0.2**	< 0.010	**0.0015 J**	< 0.010	**0.0037 J**	< 0.0100	< 0.0100	0.0037 J	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	**0.0021 B**	0.01 U
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0028 JB**	**0.0023 J**	< 0.020	< 0.020	**0.0028 J**	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.020	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 UN	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0068 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.0050	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0033 B**	0.005 U	**0.002 B**	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**20.4**	**21.1**	**22**	**22**	**24**	**19**	**20**	**22**	**22**	**23**	**24**	**24**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	**0.0021 J**	< 0.0200	< 0.0200	0.0021 J	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	1 U	1 U	1 U	**1**	**0.9**	**0.87 B**	**0.92 B**	**0.9 B**	**0.86 B**	**1.1**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.010	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40.8**	**47**	**46**	**49**	**47**	**44**	**44**	**46**	**49**	**44**	**45**	**46**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.0010	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0023 J**	**0.0019 J**	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0023 B**	**0.0027 B**	0.01 U	**0.0023 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.016 J**	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	0.02 UJ	0.020 U	0.02 U	0.02 U	**0.0091 B**	**0.013 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-22																													
			1/13/2015	7/14/2014	1/9/2014	7/8/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/18/2010	7/15/2010	1/5/2010	7/21/2009	07/09 DUP	1/13/2009	7/22/2008	1/8/2008	8/21/2007**	7/11/2007	2/15/2007	7/11/2006	1/15/2006	7/19/2005	7/13/2004	1/21/2004	7/15/2003	1/20/2003	7/11/2002	1/22/2002	7/10/2001	1/18/2001
			Post-ISCO																					Pre-ISCO								
Field Parameters																																
Conductivity	*	mS/cm	0.196	0.174	0.177	0.214	0.237	0.289	0.354	0.307	2.43	0.297	0.254	0.301	0.301	1.06	0.433	0.490	0.38	0.338	0.413	0.378	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.08	0.64	2.67	0.63	1.69	0.5	1.33	1.10	6.43	0.65	2.4	3.74	3.74	6.1	0.43	1.50	0.24	0.77	3.31	3.58	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-22.3	17.8	87.0	68.2	84.8	75.3	72.8	124.3	108	147	-13.9	143.5	143.5	120.8	159.4	101.1	56.9	162.9	162	209.3	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.13	6.69	6.39	6.28	6.42	6.23	6.31	5.69	0.366	6.09	6.5	6.43	6.43	6.43	0.377	6.09	6.18	6.15	6.15	6.24	6.21	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.5	23	18.71	22.98	14.01	26.6	20.32	23.74	17.99	22.84	16.39	25.77	25.77	18.01	22.91	21.79	24.02	24.07	18.93	23.45	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.35	0.87	8.97	5.25	5.32	7.92	1.01	108	8.4	4.05	25.6	7.26	7.26	4.6	5.64	1.99	2.72	6.13	2.60	3.47	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	59.7	69.2	117	117	40	52	780 B	680 B	710	--	610	410 *	690 *	600	750	< 1000	--	< 1000	--	140	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.196	0.643	0.25	0.17	0.19	0.1	0.12	0.073	0.2	0.033 B	0.54
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	0.082 JHF	--	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	--	0.33	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 U	0.0167	0.01 U	0.04	0.13	0.04 UJ	0.087	0.035	0.15	0.0081 B	0.038
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	180	<4	<4	1.2	0.65	< 0.29	0.50 J	0.33	--	1.1	0.29	0.25	0.29	0.13	2.2	--	13	0.23	2,400	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.63	< 0.25	0.85	0.28	0.93	1.1	0.74	0.90	3.8	--	4.3	5.4	5.4	2.7	12	1.9	--	1.6	3.0	2.3	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	8.02 H	8.04 H	6.18 H	7.24 H	6.4	4.8	1.2	1.5	1.3	--	1.5	1.4	1.7	1.1	1.2	3.1	--	5.0	4.6	1.4	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	24	2.6	26	20	31	52	64	54	62	--	47	47	47	64	66	99	--	66	63	60	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	--	< 50	50 U	10 U	25 U	25 U	25 U	**44**	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.2 J B** *	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	**0.51 J**	**0.28 J**	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(e,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.044	< 0.043	< 0.049	< 0.044	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**2.8**	< 0.50	**1.6**	< 0.50	< 0.22	< 0.097	< 0.095	< 0.11	**0.5**	< 0.19	< 0.19	< 0.19	< 0.19	0.10 J	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	**0.092**	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.742**	**0.335**	0.2 U	0.2 U	0.2 U	**0.11 B**	**0.051 B**	**0.22**	0.2 U	**0.32**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0300**	< 0.0200	**0.0322**	**0.0322**	**0.031**	**0.038**	**0.050**	**0.049**	**0.052**	**0.044**	**0.042**	**0.039**	**0.051**	**0.042**	**0.05**	**0.0712**	--	**0.0767**	**0.0505**	**0.0563**	0.2 U	**0.0656**	**0.065**	**0.065**	**0.05**	**0.056**	**0.058**	**0.061**	**0.053**	**0.056**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	**0.0156**	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**22**	**26.8**	**27**	**27**	**21**	**22**	**22**	**23**	**23**	**22**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	**0.0028 J**	**0.0027 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.0054 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0017 B**	**0.0014 B**	**0.00093 B**	0.02 U	**0.0013 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.015**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	**0.0025 B**	0.005 U	0.005 U	0.005 U	0.005 U
Maonesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**25.7**	**32.4**	**32**	**33**	**27**	**28**	**30**	**30**	**30**	**29**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00013 B**	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0023 J**	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	1 U	1 U	**0.5**	**0.24 B**	**0.24 B**	**0.28 B**	**0.27 B**	**0.29 B**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0063 B**	0.01 U	0.01 U	**0.0063 B**	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**31**	**45.5**	**41**	**40**	**47**	**40**	**42**	**39**	**41**	**43**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	**0.00026 J**	**0.00028 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	**0.0046 J**	**0.0038 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	**0.0140**	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	**0.144**	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	**0.010 J**	**0.014 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	**0.0353**	< 0.02	0.02 U	0.02 U	**0.117 J**	0.02 U	**0.021**	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
**: Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-24		MW-25																		
		Sample Date	7/15/2010	10/4/2006	7/22/2009	1/13/2009	7/16/2008	1/8/2008	7/10/2007	2/14/2007	7/13/2006	1/11/2006	7/19/2005	1/19/2005	7/14/2004	1/21/2004	7/17/2003	1/20/2003	7/17/2002	1/22/2002	7/13/2001	7/13/2001	1/23/2001
		Unit	Post-ISCO		Post-ISCO								Pre-ISCO										
Field Parameters																							
Conductivity	*	mS/cm	0.501	0.52	0.820	4.52	0.848	0.839	0.731	0.89	0.83	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	3.82	0.13	1.31	5.82	0.45	0.39	0.32	1.48	0.18	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	169	25.2	-274.1	130.7	6.9	42.1	69.3	54.3	51.8	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.36	6.34	5.84	0.437	5.71	5.79	5.64	5.71	5.80	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	23.48	24.05	22.61	17.94	22.26	22.04	22.45	18.14	22.14	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	8.79	0.47	1.64	1.7	2.79	0.95	0.00	0.73	3.16	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																							
Carbon Dioxide	*	µg/L	850 JB	--	1,700 *	1,100	1,700	< 1000	< 1000	--	1,,500	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	2.97	1.82	2.65	2.4	2.4	4.9	2.1	2.6	2.6	3.9	3.0	3.0	2.9
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.10 HF	--	2.3 HF	0.62 HF	3.9	4.84	4.22	2.78	2.46	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	1.13	0.756	0.825	0.77	0.94	0.99	1.1	0.94	1.1	1.1	0.97	0.98	0.83
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	0.965	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 0.19	--	3.1	0.87	1.2	1.6	2.5	1.9	2	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	5.8	--	< 1.1	0.077	< 0.50	< 0.25	0.37	< 0.25	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	1.6	--	1.1	1.1	1.1	1.9	2.5	2.1	3	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	83	--	100	38	110	140	120	120	170	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																							
Acetone	4,000	µg/L	< 100	50	< 100	< 100	< 100	< 50	< 50	< 50 U	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**
Carbon Disulfide	4,000	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	5	< 5.0	< 5.0	**0.5 J**	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.66 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.37 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																							
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**1,500**
Acenaphthene	2,000	µg/L	< 0.20	10	< 0.19	< 0.19	**0.062 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**140**
Acenaphthylene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	**0.28**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**6.2 J**
Anthracene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**23 J**
Benz(a)anthracene	0.1	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(a)pyrene	0.2	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.20	0.1	< 0.19	< 0.19	< 0.19	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(g,h,i)perylene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(k)fluoranthene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Chrysene	0.2	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.20	0.1	< 0.19	< 0.19	< 0.19	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	0.001 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**40 J**
Fluoranthene	1,000	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**13 J**
Fluorene	1,000	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**76**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Naphthalene	20	µg/L	< 0.20	10	< 0.19	**0.089 J**	**3.1**	< 10	< 10	< 10	10 U	**0.24**	**1.3**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**10,000 D**
Phenanthrene	10	µg/L	< 0.20	10	< 0.19	**0.031 J**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**67**
Pyrene	1,000	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**14 J**
Inorganic Compounds																							
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	0.2 U	**0.266**	0.2 U	0.2 U	**0.66**	0.2 U	0.2 U	**0.04 B**	0.2 U	**0.047 B**	**0.048 B**	**0.039 B**
Antimony	0.01	mg/L	< 0.020	0.02	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	0.05	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0036 B**	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.073**	**0.0821**	**0.18**	**0.16**	**0.21**	**0.166**	**0.214**	**0.224**	**0.198**	**0.231**	**0.238**	**0.23**	**0.26**	**0.26**	**0.29**	**0.32**	**0.33**	**0.35**	**0.32**	**0.33**	**0.31**
Beryllium	0.004	mg/L	< 0.0040	0.01	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	**40.1**	**45.5**	**38**	**44**	**47**	**51**	**50**	**56**	**56**	**53**	**53**	**47**
Chromium	0.1	mg/L	< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	**0.0107**	0.01 U	**0.011**	**0.013**	**0.015**	0.01 U	**0.014**	**0.017**	**0.016**	**0.016**	**0.016**	**0.015**
Copper	1.3	mg/L	< 0.020	0.01	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	**0.0015 B**	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	0.01	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	**36.1**	**40.1**	**34**	**40**	**42**	**52**	**45**	**50**	**51**	**48**	**48**	**43**
Mercury	0.002	mg/L	< 0.00020	0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	0.02	< 0.040	**0.0016 J**	**0.0120 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0063 B**	**0.0082 B**	**0.0074 B**	**0.0061 B**	**0.0068 B**	**0.0066 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	5 U	**1.68**	**1.7**	**2**	**2.1**	**2.4**	**2.6**	**2.9**	**2.8**	**2.6**	**2.7**	**2.3**
Selenium	0.05	mg/L	< 0.020	0.02	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	**90.2**	**114**	**85**	**96**	**86**	**95**	**110**	**110**	**89**	**89**	**89**	**78**
Thallium	0.002	mg/L	< 0.0010	0.001	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	0.02	< 0.020	**0.012 J**	**0.0100 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.08**	0.02 U	**0.0064 B**	**0.0089 B**	**0.0092 B**	**0.01 B**	**0.0079 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-201		MW-202DR												
		Sample Date	10/4/2006	7/9/2002	1/13/2015	7/17/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/16/2012	7/5/2011	01/11 DUP	1/17/2011	7/13/2010	1/5/2010	2/15/2007
		Unit	Post-ISCO	Pre-ISCO	Post-ISCO												
Field Parameters																	
Conductivity	*	mS/cm	670	--	0.524	0.518	0.420	0.549	0.557	0.53	0.642	0.641	2.26	2.26	0.582	0.716	1.542
Dissolved Oxygen (YSI)	*	mg/L	0.16	--	1.29	0.2	4.17	0.23	0.70	0.02	0.82	1.20	6.43	6.43	2.44	8.29	12.98
Oxidation Reduction Potential	*	mV	18.6	--	-16.1	48.1	61.4	101.6	126.0	92.5	75.9	136.8	126.5	126.5	122.3	12.3	138.7
pH	*	SU	6.27	--	6.13	6.33	6.32	5.91	6.31	6.08	6.20	6.22	0.537	0.537	6.13	6.1	5.95
Temperature	*	Celsius	23.14	--	16.5	21.6	15.02	23.67	19.36	23.7	19.70	23.09	16.83	16.83	22.25	18.92	19.48
Turbidity	*	NTU	0.99	--	1.74	3.98	1.51	9.38	7.90	8.53	4.50	60.9	9.24	9.24	8.54	8.02	1.76
Monitored Natural Attenuation Parameters																	
Carbon Dioxide	*	µg/L	--	--	196	234	324	219	100	120	1,300 B	1,500 B	1,000 *	1,100 *	1,300	1,500	--
Iron	*	mg/L	--	**0.28**	**--**	**--**	**--**	**--**	**--**	**--**	--	--	--	--	**--**	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.1
Manganese, Total	*	mg/L	--	**1.5**	--	**--**	**--**	**--**	**--**	**--**	--	--	--	--	**--**	--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	< 4	< 4	<4	<4	< 0.58	76	< 0.29	0.36 J	0.20	< 0.19	0.22	0.33	4.5
Nitrate	*	mg/L	--	--	0.31	< 0.25	<0.25	0.25	0.82	0.82	0.24 J	0.25	0.84 J	0.90 J	0.63 JH	< 1.1	< 0.25
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	8.27 H	5.25 H	7.58 H	6.92 H	6.3	6.3	1.4	1.6	1.5	1.3	1.4	1.7	36
Sulfate	*	mg/L	--	--	56	61	64	67	68	72	75	80	79	78	76	98	340
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																	
Acetone	4,000	µg/L	< 50	< 25	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 50
Benzene	5	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5
Carbon Disulfide	4,000	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5
Ethylbenzene	700	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 1.0	< 5.0	< 5.0	< 5
Methylene Chloride	5	µg/L	< 5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 0.11	< 5.0	< 5.0	< 5
Toluene	1,000	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5
Trichloroethylene	5	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5
Xylenes, total	2,000	µg/L	< 5	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5
Semivolatile Organic Compounds																	
2-Methylnaphthalene	*	µg/L	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	2,000	µg/L	< 10	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Acenaphthylene	10	µg/L	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Anthracene	10	µg/L	< 10	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 10	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Benzo(k)fluoranthene	10	µg/L	< 10	< 10	< 0.050	< 0.050	**0.060**	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Chrysene	0.2	µg/L	< 0.05	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.044	< 0.043	< 0.048	< 0.048	< 0.19	< 0.19	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.1
Dibenzofuran	1	µg/L	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	1,000	µg/L	< 10	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Fluorene	1,000	µg/L	< 10	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 10	< 0.050	< 0.050	**0.065**	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.05
Naphthalene	20	µg/L	< 10	< 10	**2.7**	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	**1.2**	< 0.095	< 1.0	**0.24**	< 0.19	< 0.19	< 10
Phenanthrene	10	µg/L	< 10	< 10	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Pyrene	1,000	µg/L	< 10	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Inorganic Compounds																	
Aluminum (fume or dust)	*	mg/L	--	**0.042 J**	**--**	**--**	--	**--**	**--**	**--**	--	--	**--**	**--**	--	--	--
Antimony	0.01	mg/L	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.02
Arsenic	0.05	mg/L	< 0.05	< 0.01	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.05
Barium	2	mg/L	**0.0647**	**0.084**	**0.0536**	**0.0549**	**0.0541**	**0.0519**	**0.050**	**0.055**	**0.062**	**0.062**	**0.061**	**0.059**	**0.054**	**0.05**	**0.104**
Beryllium	0.004	mg/L	< 0.01	< 0.004	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0011	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.005
Calcium metal	*	mg/L	--	**49**	**--**	**--**	--	**--**	**--**	**--**	--	--	--	--	--	--	--
Chromium	0.1	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0049 J**	**0.0041 J**	**0.0038 J**	**0.0037 J**	**0.0015 J**	< 0.010	< 0.010
Cobalt	*	mg/L	--	**0.0099 J**	**--**	**--**	--	**--**	**--**	**--**	--	**--**	--	--	--	--	--
Copper	1.3	mg/L	< 0.01	< 0.0016	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0058 J**	< 0.0019	< 0.0019	< 0.0019	**0.0030 J**	< 0.020	< 0.010
Cyanide	0.2	mg/L	< 0.01	**0.12**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.016**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.01	< 0.005	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010
Magnesium	*	mg/L	--	**39**	**--**	**--**	**--**	**--**	**--**	**--**	--	--	--	--	--	--	--
Mercury	0.002	mg/L	< 0.0002	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.0002
Nickel	0.1	mg/L	< 0.02	**0.0049 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.013 J**	**0.0031 J**	< 0.0023	< 0.0023	**0.0071 J**	< 0.040	< 0.02
Potassium	*	mg/L	--	**1.1**	**--**	**--**	--	**--**	**--**	**--**	--	**--**	--	--	--	--	--
Selenium	0.05	mg/L	< 0.02	< 0.01	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	**0.0079 J**	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.02
Sodium	*	mg/L	--	**100**	**--**	**--**	--	**--**	**--**	**--**	--	**--**	--	--	**--**	--	--
Thallium	0.002	mg/L	< 0.001	< 0.002	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0027 J**	**0.0049 J**	**0.0028 J**	< 0.0024	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	**0.018 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.038**	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
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M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-203																									
		Sample Date	1/14/2015	7/15/2014	1/14/2014	7/10/2013	1/10/2013	7/24/2012	1/23/2012	7/5/2011	1/18/2011	7/13/2010	1/12/2010	7/22/2009	1/13/2009	7/23/2008	1/10/2008	8/21/2007**	7/12/2007	2/14/2007	7/13/2006	1/16/2006	7/22/2005	7/16/2004	1/24/2004	7/16/2003	7/17/2002	1/21/2002	1/17/2001
		Unit	Post-ISCO																				Pre-ISCO						
Field Parameters																													
Conductivity	*	mS/cm	0.224	0.454	0.339	0.475	0.343	0.570	0.505	0.550	1.55	0.475	0.564	0.882	16.94	0.871	0.517	0.759	0.818	0.94	0.863	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.72	0.57	0.58	0.41	5.39	0.51	3.42	1.67	6.20	1.98	15.27	19.69	5.68	0.97	3.20	3.9	10.34	11.99	21.49	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	69.3	-99.8	144.9	-80.2	87.9	81.6	13.9	102.0	7.0	111.1	35.7	189	377.4	140.1	59.2	161.3	152.6	137.2	149	--	--	--	--	--	--	--	--
pH	*	SU	6.28	6.23	6.64	6.07	6.43	5.45	6.20	6.18	0.58	6.23	7.07	5.98	0.799	5.82	6.10	5.77	5.77	5.93	5.66	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.6	22.92	19.11	20.21	18.30	26.92	16.54	21.85	19.41	23.63	16.1	23.18	19.61	22.18	20.90	23.34	21.77	19.01	21.35	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.70	5.97	0.77	0.54	7.22	0.98	1.96	4.75	2.19	6.67	7.18	3.01	3.2	1.54	0.58	1.12	1.48	1.09	0.58	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																													
Carbon Dioxide	*	µg/L	81.2	147	219	146	110	92	2,000 B	1,200 B	1,300	960	1,500	2,300 *	1,700	2,300	< 1000	--	< 1000	--	2,900	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.361	0.903	0.068	0.087	0.09	0.13	0.039 B	0.089
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	0.802	0.28 HF	< 0.10 HF	0.45 HF	< 0.025 HF	0.73 HF	0.098 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	--	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.39	1.52	1.55	0.57	0.54	0.54	1.7	1.7	1.5
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.15	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	270	<4	9	5.8	4.2	10	0.57 J	19	0.47	2.1	0.31	1.1	0.54	2.6	--	2.9	4.5	5.8	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.51	< 0.25	0.32	0.49	< 0.25	< 0.25	0.10 J	0.30	0.81 J	5.6	3	4.7	2.3	5.7	2.9	--	2.9	3	3.1	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.9	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.45	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	9.08 H	7.17 H	6.34 H	7.55 H	6.9	6.9	1.2	2.0	1.4	1.2	1.8	1.6	1.5	1.0	2.0	--	12	11	18	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	13	58	59	62	80	61	69	67	67	57	86	120	120	90	140	--	95	96	120	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--
Volatile Organic Compounds																													
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	--	< 50	50 U	10 U	**420**	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	**2.7**	**62**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.19 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.49 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	**44**	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	**15**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																													
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0 U	**0.44**	2.0 U	**0.24**	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	**0.075**	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	--	< 0.1	< 0.1	0.1 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	**0.12**	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	**0.068**	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.046	< 0.055	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	**0.13**	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	--	< 0.1	< 0.1	0.1 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.13**	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.050	< 0.50	< 0.50	< 0.50	<0.19	**2.5**	**0.58**	**0.52**	< 0.11	< 0.19	**0.21**	< 0.19	< 0.19	**0.09 J**	< 10	--	< 10	< 10	10 U	**1.1**	**6.7**	2.0 U	**1.4**	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 UJ	10 U	10 U	10 U
Inorganic Compounds																													
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.631**	**4.81**	0.2 U	0.2 U	0.2 U	**0.032 B**	0.2 U	0.2 U
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0060 B**
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0046 J**	**0.0047 J**	**0.0047 J**	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0758**	**0.0499**	**0.0602**	**0.0757**	**0.13**	**0.068**	**0.047**	**0.059**	**0.078**	**0.066**	**0.066**	**0.072**	**0.056**	**0.083**	**0.0542**	--	**0.0516**	**0.0311**	**0.0415**	0.2 U	**0.0139**	**0.14**	**0.14**	**0.14**	**0.18**	**0.17**	**0.17**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00025 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0019 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	**0.0045 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40.5**	**41.7**	**50**	**52**	**48**	**63**	**59**	**56**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0040 J**	**0.013**	**0.0079 J**	**0.0042 J**	< 0.010	< 0.010	0.013	**0.0055 J**	< 0.0100	--	**0.0117**	< 0.010	0.01 U	0.005 U	**0.101**	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0626**	**0.0917**	0.01 U	0.01 U	0.01 UJ	**0.015**	**0.014**	**0.013**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0022 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0090 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0029 J**	< 0.0050	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	**0.0016 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**34.3**	**34.2**	**43**	**43**	**43**	**53**	**51**	**49**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0070 J**	**0.0036 J**	**0.0068 J**	**0.0092 J**	< 0.040	< 0.040	**0.0021 J**	**0.0071 J**	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	**0.0066 B**	**0.0054 B**	**0.0063 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**5.34**	**1.3**	**1.2**	**1.3**	**1.6**	**1.5**	**1.5**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	**0.0099 J**	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0066 J**	**0.0097 J**	< 0.0200	--	< 0.02	< 0.02	0.02 U	**0.0097**	**0.019**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**81.8**	**75.5**	**150**	**140**	**130**	**160**	**130**	**130**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.002 U	0.002 UWN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	**0.0607**	**0.0135**	**0.0374**	**0.0155**	**0.016**	< 0.010	**0.0075 J**	**0.019**	**0.012**	**0.019**	**0.028**	**0.023**	**0.017**	**0.0110 J**	**0.0194**	--	**0.0163**	**0.0246**	**0.0319**	**0.0601**	**0.484**	0.01 U	0.01 U	0.01 UJ	**0.0052 B**	**0.0034 B**	**0.0034 B**
Zinc	2	mg/L	**0.0312**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.016 J**	**0.019 J**	**0.029**	**0.011 J**	< 0.020	< 0.020	**0.011 J**	0.011	< 0.0200	--	< 0.02	< 0.02	0.02 U	**0.0475**	**0.079**	0.02 U	0.02 U	**0.03**	**0.015 B**	**0.017 B**	**0.015 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	7/16/2014	1/9/2014	1/10/2013	7/26/2012	1/25/2012	7/7/2011	1/20/2011	7/13/2010	1/12/2010	7/29/2009	1/21/2009	7/23/2008	1/10/2008	1/17/2006	7/22/2005	7/16/2004	1/24/2004	7/18/2003	4/4/2002	1/22/2002	01/02 DUP	7/17/2001	07/01 DUP	1/23/2001
																	Pre-ISCO									
Field Parameters																										
Conductivity	*	mS/cm	0.568	0.455	0.464	0.202	0.417	0.463	0.85	0.41	0.486	0.548	0.33	0.577	0.497	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.23	0.39	0.36	0.25	1.04	0.28	5.44	0.23	1.37	1.18	5.96	0.61	1.03	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-107.1	-103.4	18.1	-29.2	-57.8	-59.6	57.3	-109.7	8.15	-36.8	-27	-29.8	-60.1	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.43	6.25	6.32	6.21	6.27	6.60	0.382	5.95	6.15	6.43	0.426	6.08	5.79	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	22.24	18.74	21.13	21.81	20.56	24.56	17.03	21.64	15.94	23.08	19.82	26.48	22.91	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	11.1	7.53	6.42	10.5	9.26	26.6	11.4	3.1	9.3	8	4.2	8.76	2.29	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																											
Carbon Dioxide	*	µg/L	342	332	140	140	2,800 B	380 B	2,300	2,600	1,900	2,100 *	2,300	3,000	< 1000	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	54.8	34.2	0.34	0.46	0.19	--	1.1	1.2	0.36	0.52	0.49
Iron, as Ferrous (Fe+2)	*	mg/L	3.78	0.949	0.35 HF	0.29 HF	1.7 HF	1.7 HF	0.045 J HF	1.9 HF	2.0 HF	0.33 HF	< 0.10 HF	0.50 HF	0.19	5.87	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	2.46	3.8	1.7	1.7	1.6	--	1.5	1.6	1.4	1.4	1.5
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	180	290	380	2000	230	260	250	130	520	310	250	300	490	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	<0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.36	<1.1	< 1.1	< 1.1	< 0.050	0.20	< 0.25	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	6 H	6.82 H	5.1	2.4	1.6	1.3	1.2	1.4	1.3	2.1	1.3	0.99	1.9	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	79	7.8	< 5.0	< 5.0	3.2 J	< 2.6	6.5	23	16	24	26	41	86	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																											
Acetone	4,000	µg/L	< 50	<50	< 100	< 100	**5.7 J**	**21 J**	< 500	< 1000	< 10000	< 2000	< 2000	< 5000	**150**	**2,000**	**5,400**	< 2,500	< 2,500	< 1,300	--	< 1,200	< 1,200	< 620	< 1,200	< 1,200
Benzene	5	µg/L	**1,100**	**3,100**	**4,300 D**	**3,300 D**	**6,600**	**12,000**	**8,900**	**5,600**	**12,000**	**7,500 D**	**2,700**	**5,500**	**8,300**	**6,500**	**5,500**	**4,100**	**3,500**	**3,300**	**6,400**	**6,400**	**6,000**	**5,500 D**	**6,500**	**7,700**
Carbon Disulfide	4,000	µg/L	< 5.0	<5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 60	< 500	< 500	< 100	< 100	< 250	< 5.0	< 200	< 200	< 100	< 100	< 50	--	< 50	< 50	< 50	< 50	< 50
Ethylbenzene	700	µg/L	**170**	**360**	**400 D**	**490 D**	**660**	**510 J**	**490 J**	**220**	**750**	**440**	< 100	200 J	**160**	< 200	**130**	**180**	**260**	**240**	**280**	**350**	**360**	**450**	**610**	**470**
Methylene Chloride	5	µg/L	< 5.0	<5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 100	< 50	< 500	< 100	260	< 250	< 5.0	< 200	< 100	< 500	< 500	< 250	< 250	< 250	< 250	< 0.12	< 250	**55 JB**
Toluene	1,000	µg/L	**77**	**99**	**940 D**	**1,100 D**	**1,500**	**4,300**	**1,400**	**340**	**2,200**	**1,300**	**650**	**1,600**	**2,800**	**5,100**	**4,300**	**2,500**	**2,400**	**2,400**	**5,800**	**6,700**	**6,400**	**6,700 D**	**8,400**	**8,100**
Trichloroethylene	5	µg/L	< 5.0	<5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 13	< 50	< 500	< 100	< 100	< 250	< 5.0	< 200	< 200	< 100	< 100	< 50	< 50	< 50	< 50	< 0.025	< 50	< 50
Xylenes, total	2,000	µg/L	**220**	**250**	**500 D**	**640 D**	**640**	**1,000**	**680**	**520**	**1,100**	**940**	**790**	**970**	**1,100**	**1,600**	**1,100**	**1,800**	**2,200**	**2,300**	--	**3,400**	**3,500**	**4,600**	**6,100**	**4,600**
Semivolatile Organic Compounds																											
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**1,200**	**2,500**	**760**	**1,200**	**820**	--	**1,100**	**1,200**	**1,400 D**	**1,200 D**	**1,200**
Acenaphthene	2,000	µg/L	**12**	**14**	<22	**11**	**11**	**2.6**	**6.8**	**5.2**	**3.1**	< 10 *	< 38	**2.5 J**	< 10	< 27	< 30	< 200	< 160	**20**	**42 J**	**23 J**	**23 J**	**27 J**	**26 J**	**26 J**
Acenaphthylene	10	µg/L	**7.0**	**6.7**	<22	**6.9**	**14**	**2.6**	**18**	**11**	**11**	**11**	**9.5 J**	**6.3**	**22**	**65**	**490**	**200**	**190**	**300**	**580**	**350**	**400**	**460**	**430**	**380**
Anthracene	10	µg/L	**4.3**	**3.7**	<22	< 3.9	**4.3**	**2.9**	**4.7**	**3.6**	**4.2**	< 10	< 38	**3.2 J**	**10**	< 27	**88**	< 200	**15**	< 10	**38 J**	**10 J**	**10 J**	**15 J**	**18 J**	**15 J**
Benz(a)anthracene	0.1	µg/L	**2.5**	**1.3**	<22	< 3.9	**1.5 J**	**2.1**	**1.7 J**	**1.2 J**	**3.4**	< 10	< 38	**0.52 J**	**0.78**	< 27	**86**	< 200	**3.8**	< 10	**20 J**	< 200	< 100	**6.1 J**	**9.3 J**	**3.2 J**
Benzo(a)pyrene	0.2	µg/L	**1.8**	**0.73**	<22	< 3.9	< 1.1	**1.4**	**1.1 J**	< 1.9	**2.9**	< 10	< 38	< 3.9	**0.16**	< 27	**55**	< 200	**4.2**	< 10	**14 J**	< 200	< 100	**3.3 J**	**5.6 J**	< 50
Benzo(b)fluoranthene	0.2	µg/L	**1.7**	**0.59**	<22	< 3.9	< 1.1 *	**0.86**	< 1.0	< 1.9 *	**2**	< 10	< 38	< 3.9	**0.20**	< 27	**49**	< 200	**4**	< 10	**10 J**	< 200	< 100	**2.7 J**	**0.43 J**	< 50
Benzo(g,h,i)perylene	10	µg/L	**0.76**	**0.27**	<22	< 3.9	< 1.1	**0.41**	< 1.0	< 1.9	<2.0	< 10	< 38	< 3.9	< 10	< 27	**34**	< 200	**1.5**	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Benzo(k)fluoranthene	10	µg/L	**0.59**	**0.2**	<22	< 3.9	< 1.1	**1.0**	< 1.0	< 1.9	<2.0	< 10	< 38	< 3.9	< 10	< 27	**32**	< 200	< 0.2	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Chrysene	0.2	µg/L	**2**	**0.9**	<22	< 3.9	**1.4 J**	**1.7**	**1.6 J**	**0.97 J**	**2.6**	< 10	< 38	< 3.9	**0.62**	< 27	**85**	< 200	**3.4**	< 10	**19 J**	< 200	< 100	**5.8 J**	**9.1 J**	**3.3 J**
Dibenzo(a,h)anthracene	0.3	µg/L	**0.19**	<0.10	<22	< 3.9	< 1.1	**0.18 J**	< 1.0	< 1.9	< 2.0	< 10	< 38	< 3.9	< 0.10	< 27	< 30	< 200	< 0.2	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	< 130	**50**	< 200	< 160	**12**	--	**14 J**	**16 J**	**17 J**	**17 J**	**18 J**
Fluoranthene	1,000	µg/L	**5.6**	**4.3**	<22	< 3.9	**6.2**	**3.5**	**6.8**	**4.4**	**8.5**	< 10	**3.7 J**	**3.8 J**	< 10	**98**	**200**	< 200	**13**	< 10	**43 J**	< 200	**5.1 J**	**14 J**	**20 J**	**11 J**
Fluorene	1,000	µg/L	**31**	**38**	**33**	**47**	**68**	**38**	**75**	**46**	**29**	**48**	**21 J**	10	**26**	**97**	**260**	< 200	< 160	**51**	**120**	**58 J**	**61 J**	**76**	**76**	**90**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.65**	**0.24**	<22	< 3.9	< 1.1	**0.32**	< 1.0	< 1.9	< 2.0	< 10	< 38	< 3.9	0.11	< 27	**44**	< 200	**1.2**	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Naphthalene	20	µg/L	**390**	**1,300**	**1,400 D**	**2,300**	**600 D**	**0.53**	**3,800**	**1,300**	**1,400**	**1,900 B**	**2,200**	**2,000**	**2,900**	**5,500**	**17,000**	**5,700**	**8,800**	**12,000**	**7,700 D**	**13,000 D**	**15,000 D**	**17,000 D**	**14,000 D**	**12,000 D**
Phenanthrene	10	µg/L	**38**	**41**	**30**	**40**	**56**	**17**	**46 ***	**35**	**22**	**17**	**13 J**	**28**	**64**	**300**	**580**	< 200	< 160	**50**	**210**	**69 J**	**71 J**	**91**	**110**	**90**
Pyrene	1,000	µg/L	**7.2**	**5**	<22	**4.6**	**7.4**	**7.7**	**8.8**	6	**10**	< 10	**5.6 J**	**3.9**	< 10	**120**	**220**	< 200	**14**	< 10	**69 J**	< 200	**6.9 J**	**20 J**	**31 J**	**14 J**
Inorganic Compounds																											
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**29.6**	**115**	< 0.2	< 0.2	< 0.2	--	**0.041 B**	**0.062 B**	**0.21 N**	**0.43 N**	**0.21**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.01	< 0.06	< 0.02	< 0.02	< 0.02	--	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	**0.0059 J**	< 0.020	< 0.020	**0.0063 J**	< 0.010	<0.0500	**0.0195**	**0.0266**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Barium	2	mg/L	< 0.0200	<0.0200	< 0.010	< 0.010	**0.0078 J**	**0.020**	**0.013**	**0.012**	< 0.010	< 0.010	**0.0055 J**	**0.0097 J**	< 0.0200	< 0.2	**0.075**	**0.14**	**0.14**	**0.13**	--	**0.11**	**0.11**	**0.12**	**0.12**	**0.13**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00042 JB**	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	**0.0074**	**0.0233**	< 0.004	< 0.004	< 0.004	--	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**43**	**65.7**	**63**	**65**	**60**	--	**53**	**54**	**51**	**52**	**54**
Chromium	0.1	mg/L	**0.0133**	< 0.0100	< 0.010	< 0.010	**0.0014 J**	**0.0035 J**	**0.0035 J**	**0.0043 J**	< 0.010	< 0.010	**0.0033 JB**	**0.0027 J**	< 0.0100	**0.178**	**0.494**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.314**	**0.607**	< 0.01	< 0.01	< 0.01	--	**0.0054 B**	**0.0061 B**	**0.0047 B**	**0.0054 B**	**0.0060 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0033 J**	**0.0050 JB**	**0.0024 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	**0.0365**	**0.212**	< 0.02	< 0.02	< 0.02	--	< 0.02	< 0.02	< 0.02	< 0.02	**0.0013 B**
Cyanide	0.2	mg/L	**0.012**	< 0.010	<0.010	**0.012**	**0.012**	**0.014**	**0.020**	**0.013**	**0.025**	**0.033**	**0.03**	**0.0084 J**	**0.023**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.015	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	**0.0053 J**	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.003	**0.0293**	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**38.9**	**58.2**	**54**	**55**	**58**	--	**47**	**49**	**46**	**46**	**49**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0030 J**	**0.0059 J**	**0.0060 J**	**0.0096 J**	< 0.040	< 0.040	**0.029 J**	**0.0300 J**	< 0.0200	**0.196**	**0.385**	< 0.04	< 0.04	< 0.04	--	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.95**	**14**	**1.7**	**1.5**	**1.2**	--	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	**0.0102**	**0.0227**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.6**	**26.9**	**97**	**87**	**79**	--	**55**	**56**	**67**	**68**	**66**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 0.001	< 0.001	< 0.002	< 0.001	< 0.002	--	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	**0.235**	**0.75**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.030**	**0.030**	**0.022**	< 0.020	< 0.020	**0.022**	< 0.020	< 0.0200	**0.38**	**0.992**	< 0.02	< 0.02	**0.05**	--	**0.009 B**	**0.011 B**	**0.01 B**	**0.0076 B**	**0.02 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
** - Not sampled due to DNAPL
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
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Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-206																													
			Post-ISCO																				Pre-ISCO									
		1/14/2015	7/16/2014	1/14/2014	7/10/2013	1/10/2013	7/26/2012	1/23/2012	7/6/2011	1/19/2011	7/14/2010	1/6/2010	7/28/2009	07/09 DUP	1/15/2009	7/22/2008	1/8/2008	8/21/2007**	08/07 DUP	7/11/2007	2/15/2007	7/13/2006	1/14/2006	7/21/2005	1/19/2005	7/14/2004	1/24/2004	1/17/2003	7/10/2002	4/3/2002	1/21/2002	7/12/2001	1/19/2001
Field Parameters																																
Conductivity	*	mS/cm	0.711	0.66	0.637	0.583	0.536	5.810	0.585	0.607	14.56	0.696	0.664	0.755	0.755	5.16	0.602	0.568	0.342	--	0.497	0.456	0.377	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	7.73	3.29	3.82	1.91	3.17	2.48	9.59	5.80	9.05	4.27	21.57	9.57	9.57	6.5	2.67	3.05	5.44	--	5.42	0.99	0.19	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	42.6	-45.7	-46.2	-39.1	-39.2	-9.0	13.2	-21.1	175	132	132	12.7	145.1	145.1	-30.3	-158.4	-89.2	-50.7	--	15.1	-31.9	-20.4	--	--	--	--	--	--	--	--	--	--
pH	*	SU	8.29	7.09	7.59	6.58	6.55	6.43	9.37	6.98	0.643	7.25	10.24	7.37	7.37	0.78	8.41	7.61	9.79	--	8.42	6.13	6.14	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	12.40	24.26	19.70	20.61	23.55	30.20	16.03	22.39	19.63	24.18	16.34	30.78	30.78	19.9	25.03	21.72	23.36	--	22.18	17.79	23.35	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	8.75	249	23.20	9.72	9.96	7	1.68	5.97	15.6	4.93	3.85	18	18	9.9	10.8	14.5	29.8	--	72.3	0.62	3.23	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	319	296	317	268	76	62	73 B	720 B	33 J	710 B	< 50	400 *	380 *	87	32 J	< 1000	--	--	< 1000	--	120	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.64	11.2	7.35	9.9	7.5	11	23	11	--	12	9.4	11 N
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	0.923	1.96	0.352	0.83 HF	0.56 HF	0.037 J HF	< 0.025 HF	0.044 JHF	0.081 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	--	--	0.59	24.8	8.6	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.402	0.382	0.416	0.39	0.47	0.39	0.49	0.52	--	0.49	0.56	0.51
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.354	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	7	330	340	580	150	82	47	140	41	75	49	370	< 0.19	700	380	1,300	--	--	680	1,000	450	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.25	0.14 J	0.085 J	1.2	0.87 J	4.2	3.4	3.7	1.1	< 0.50	< 12	--	--	< 0.25	< 0.25	0.25 U	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	9.41 H	6.32 H	7.02 H	7.91 H	7.0	6.8	1.7	1.7	1.9	1.6	2.0	1.6	1.6	2.1	1.3	3.8	--	--	7.0	1.7	2.7	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	6.8	4.6	7.2	4.8	5.6	5.6	7.6	9.2	14	12	17	23	22	24	7.1	< 50	--	--	6.5	4.8	5.3	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**9.7 J**	< 100	< 100	< 100	**57 J**	**15.0 J**	< 50	< 50	< 50	--	< 50	< 50	10 U	25 U	25 U	25 U	25 U	25 U	25 U	--	25 U	25 U	25 U
Benzene	5	µg/L	< 50	< 5.0	< 5.0	< 5.0	**6.6**	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	**9.6**	**7.5**	**240**	**220**	**210**	--	**120**	< 5	**29**	**48**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.2 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.29 J**	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**1.0 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.37 J**	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.5 J**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.47 J**	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	--	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	--	< 1.0	< 1.0	< 1.0
Acenaphthene	2,000	µg/L	< 5.0	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	**< 0.19**	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.75 J**
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	--	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(e,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.048	< 0.057	< 0.045	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.93 J**
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	--	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	--	< 1.0	< 1.0	< 1.0
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	20	µg/L	**1.8**	**0.94**	< 0.50	< 0.50	**0.97**	< 0.19	**0.27**	**0.57**	**0.25**	< 0.19	< 0.19	**0.24**	**0.32**	**0.18 J**	**0.42**	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	**0.022 J**	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.0002	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**2.6**	**0.084 B**	--	0.2 U	**0.082 B**	0.2 U
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	--	< 0.02	< 0.02	< 0.02	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	--	< 0.05	< 0.05	< 0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0063 B**	0.01 U	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.201**	**0.269**	**0.270**	**0.315**	**0.25**	**0.28**	**0.14**	**0.24**	**0.16**	**0.23**	**0.10**	**0.21**	**0.22**	**0.3**	**0.28**	**0.183**	--	--	**0.255**	**0.329**	**0.344**	**0.343**	**0.314**	**0.33**	**0.35**	**0.33**	**0.41**	**0.33**	--	**0.35**	**0.34**	**0.33**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	**0.00028 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	**0.0025 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	--	< 0.005	< 0.005	< 0.005	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0011 B**	**0.00084 B**	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.7**	**18.3**	**21**	**23**	**23**	**22**	**21**	--	**22**	**23**	**21**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0029 J**	**0.0012 J**	< 0.010	< 0.010	< 0.010	**0.016**	**0.0066 J**	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0073 B**	0.01 U	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0077 B**	**0.0045 B**	--	**0.0048 B**	**0.0064 B**	**0.0046 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0037 JB**	< 0.020	< 0.020	< 0.020	< 0.020	**0.0042 J**	< 0.020	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0089 B**	**0.00092 B**	--	**0.0012 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.011**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	--	< 0.010	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0038 B**	0.005 U	--	0.005 U	0.005 U	0.005 U
Maonesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**16.4**	**12.8**	**15**	**17**	**16**	**16**	**15**	--	**16**	**17**	**15**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	--	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	**0.00024**	0.0002 U	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	**0.0030 J**	< 0.040	< 0.0200	--	--	< 0.02	< 0.02	< 0.02	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0075 B**	**0.0048 B**	--	0.04 U	**0.006 B**	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	**1.2**	**1.2**	**1.1**	**1.4**	**1.4**	--	**1.3**	**1.2**	**1.3**
Selenium	0.05	mo/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	--	< 0.02	< 0.02	< 0.02	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0055 B**	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**26.5**	**23.7**	**26**	**30**	**28**	**28**	**26**	--	**28**	**29**	**26**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	--	< 1.00	< 1	< 0.001	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	--	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	**0.0129**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	**0.0045 J**	< 0.010	< 0.010	< 0.010	< 0.010	0.028	**0.0047 J**	< 0.0100	--	--	**0.0585**	< 0.010	< 0.01	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.012**	0.01 U	--	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.013 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0708**	--	--	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.1**	**0.0073 B**	--	0.02 U	**0.007 B**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-207																													
		Sample Date	1/12/2015	7/17/2014	1/6/2014	7/8/2013	1/7/2013	7/24/2012	1/16/2012	7/5/2011	1/17/2011	7/14/2010	1/6/2010	7/27/2009	1/15/2009	7/15/2008	1/9/2009	7/10/2007	2/15/2007	7/11/2006	1/11/2006	7/21/2005	1/19/2005	7/16/2004	1/23/2004	7/20/2003	1/20/2003	7/9/2002	1/17/2002	7/11/2001	1/18/2001
		Unit	Post-ISCO														Pre-ISCO															
Field Parameters																																
Conductivity	*	mS/cm	0.513	0.492	0.492	0.532	0.524	0.628	0.523	0.616	0.13	0.603	0.586	0.672	1.01	0.635	0.709	0.531	0.709	0.646	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.30	0.86	0.22	0.06	0.14	0.10	4.79	1.43	5.54	0.66	4.48	3.56	5.85	0.39	0.31	0.30	0.78	0.28	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-56.9	75.6	-57.9	-46.0	2.1	-39.4	170.6	-55.4	-14.8	-71.1	-48.9	-36.9	-35.4	-58	-61.8	-41.9	-47.9	-70.7	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.05	6.2	6.12	6.28	6.32	5.47	2.48	5.65	0.5	6.02	5.98	6.18	0.589	6.03	6.03	6.10	6.05	6.04	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.15	22.19	18.88	21.67	18.83	24.67	18.81	23.62	17.85	25.44	15.33	26.85	16.77	22.56	21.04	23.31	17.71	23.39	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.17	0.57	1.59	7.78	0.53	2.13	2.41	9.6	NA	5.73	9.5	30	3.3	4.83	0.99	4.14	4.47	3.21	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	65.3	68.7	71	70	75	80	69	78	75	82	75
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.94	0.981	1.1	1.2	1.3	1.1	1.2	1.3	1.3 N	1.1 N	1.2
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**14 J**	< 100	< 100	< 100	**13.0 J**	< 50	< 50	< 50	< 50	< 10	< 25	< 25	< 25	< 25	**26**	< 25	**120**	< 25	< 25	< 25	< 25
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.23 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.65 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	**0.17 JB**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.10	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.046	< 0.049	< 0.045	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.10	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.058**	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	**0.12 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	**0.11 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.01	< 0.006	< 0.02	< 0.006	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.013 J**	**0.0095 J**	**0.0046 J**	**0.0082 JB**	< 0.020	< 0.020	**0.0063 J**	**0.0100 J**	<0.0500	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0048 B**	**0.0075 J**	**0.0087 B**	**0.0064 B**	< 0.01
Barium	2	mg/L	**0.271**	**0.262**	**0.353**	**0.290**	**0.35**	**0.34**	**0.34**	**0.31**	**0.33**	**0.25**	**0.29**	**0.3**	**0.35**	**0.34**	**0.366**	**0.335**	**0.323**	**0.347**	**0.335**	**0.379**	**0.38**	**0.41**	**0.41**	**0.37**	**0.4**	**0.4**	**0.4**	**0.39**	**0.41**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00024 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.005	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	**0.00079 B**	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	**0.0062**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0022 B**
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**15.4**	**15.6**	**16**	**18**	**19**	**16**	**17**	**17**	**17**	**16**	**17**	
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0016 J**	**0.0030 J**	**0.0022 J**	**0.0021 J**	< 0.010	< 0.010	**0.0020 J**	**0.0019 J**	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01N
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0182**	**0.0178**	**0.019**	**0.018**	**0.017**	**0.02**	**0.018**	**0.02**	**0.019**	**0.018**	**0.02**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.0< 25	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0011 B**	< 0.02	< 0.02	< 0.02N	**0.0016 B**	
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.012**	**0.0060 J**	**0.017**	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0050 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.015	**0.0051 B**	**0.0058 J**	**0.0059 B**	**0.0076 B**	< 0.01	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0015 B**	< 0.005	
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**18.6**	**17.4**	**18**	**18**	**18**	**16**	**17**	**18**	**18**	**18**	**17**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	**0.00014 B**	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0076 J**	**0.0056 J**	**0.0074 J**	**0.0031 J**	< 0.040	< 0.040	**0.0070 J**	**0.0065 J**	< 0.0200	< 0.02	< 0.02	0.02 U	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	**0.0062 B**	**0.0096 J**	**0.0077 B**	**0.0058 B**	**0.0075 B**	
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**1.26**	**1.6**	**1.8**	**1.8**	**1.8**	**1.6**	**1.7**	**1.8 N**	**1.5**	**1.8**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0061 B**	< 0.01	< 0.01	< 0.01	< 0.01	
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**53**	**51.9**	**49**	**52**	**43**	**50**	**53**	**44**	**40**	**51**	**44**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002WN	< 0.002J	< 0.002	< 0.002	< 0.002	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0051 J**	**0.0083 J**	**0.0048 J**	**0.0063**	< 0.010	< 0.010	**0.0045 J**	**0.0060 J**	< 0.0100	< 0.010	**0.103**	< 0.007	< 0.007	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0036 B**	< 0.004	**0.0044 B**	**0.0042 B**	< 0.01	
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.03**	< 0.02	< 0.02	**0.035**	< 0.02	**0.0069 B**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-211																		
			7/23/2009	1/15/2009	7/17/2008	1/9/2008	7/10/2007	2/13/2007	7/14/2006	1/17/2006	7/20/2005	1/19/2005	7/15/2004	1/24/2004	7/16/2003	1/16/2003	7/12/2002	1/21/2002	7/12/2001	1/16/2001
			Post-ISCO								Pre-ISCO									
Field Parameters																				
Conductivity	*	mS/cm	0.201	0.84	0.3	0.218	0.3	0.622	0.35	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.11	5.92	0.37	0.22	0.27	0.14	0.67	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-83.7	-16.5	-201	-91.0	-92.7	-28.5	-66.7	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.3	0.307	6.13	6.17	6.18	6.13	6.28	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	22.91	20.41	22.88	21.36	22.30	17.34	21.09	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	5.1	4.3	7.29	9.37	2.80	0.84	4.82	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																				
Carbon Dioxide	*	µg/L	880	710	990	< 1000	< 1000	--	720	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	14.4	15.9	2.31	0.05 U	0.05 U	3.6	0.04 U	0.050 U	0.028 B	0.05 U	0.13	0.031 B
Iron, as Ferrous (Fe+2)	*	mg/L	1.6 HF	1.2 HF	4.1	7.10	13.4	12.2	12.9	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	2.98	2.72	0.399	0.82	0.49	2.1	0.77	0.91	0.55	0.92	1.2	0.72
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	2.23	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	670	260	150	100	3,000	140	220	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 1.1	0.26	0.66	0.32	< 0.25	0.64	1.1	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	0.89	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	0.98	1.2	1.1	3.3	1.7	1.1	1.2	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	5.6	20	16	17	18	23	37	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.79 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	**0.58 J**	1.0 U	
Ethylbenzene	700	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**
Methylene Chloride	5	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.32 J**	5.0 U	5.0 U	
Toluene	1,000	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethylene	5	µg/L	**5.7**	**1.4 J**	**2.5 J**	< 5.0	**5.8**	< 5	**8.2**	**3.3**	1.0 U	**3.2**	**2.2**	**2.4**	**5**	**4.4**	**4.7**	**5.4**	**7.3**	**0.74**
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	ua/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	ua/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.19	**0.027 JB**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.25**	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	**0.364**	**3.02**	0.2 U	0.2 U	**6.4**	0.2 U	**0.068 B**	**0.028 B**	**0.03 B**	**0.13 B**	0.2 U
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	**0.0076 B**
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	**0.0126**	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.069**	**0.099**	**0.075**	**0.0714**	**0.0763**	**0.0763**	**0.0577**	0.2 U	**0.0623**	**0.066**	**0.065**	**0.094**	**0.05**	**0.052**	**0.059**	**0.064**	**0.06**	**0.047**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	**0.0022 B**
Cadmium	0.005	mg/L	**0.01**	**0.01**	**0.009**	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**--**	**--**	**--**	--	--	--	--	**27.8**	**24.1**	**17**	**21**	**20**	**22**	**22**	**22**	**23**	**22**	**20**
Chromium	0.1	mg/L	< 0.010	**0.0015 J**	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	**--**	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.020	**0.0064 J**	**0.0055 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	**0.0009 B**	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	**0.0070 J**	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0042**	**0.0158**	0.005 U	0.005 U	**0.0054**	0.005 UJ	0.0050 U	0.005 U	0.005 U	0.005 U	**0.0034 B**
Magnesium	*	mg/L	**--**	--	--	--	--	--	--	**6**	**4.2**	**9.2**	**12**	**9.9**	**9.9**	**11**	**12**	**12**	**12**	**11**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00016 B**	**0.00014 B**	**0.00016 B**	**0.00021**	**0.00025**
Nickel	0.1	mg/L	< 0.040	< 0.040	**0.0044 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**--**	--	--	--	--	--	--	**27.9**	**103**	**5.4**	**5.8**	**6**	**4.7**	**5.7**	**5.5**	**5.4**	**5.0**	**5.5**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**--**	--	--	--	--	--	--	**41.6**	**5.68**	**59**	**74**	**64**	**55**	**46**	**47**	**43**	**37**	**45**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.010	**0.0026 J**	**0.0040 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	**0.0453**	0.01 U	0.01 U	**0.013**	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.042**	**0.034**	**0.023**	**0.0320**	< 0.02	**0.0703**	0.02 U	**0.0392**	**0.291**	**0.061**	0.02 U	**0.025**	**0.04**	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-214																														
			1/13/2015	7/15/2014	1/9/2014	7/8/2013	1/8/2013	7/24/2012	1/16/2012	7/5/2011	1/17/2011	7/15/2010	1/5/2010	7/22/2009	1/14/2009	7/18/2008	1/8/2008	7/11/2007	2/15/2007	7/11/2006	1/15/2006	7/19/2005	7/13/2004	1/21/2004	7/15/2003	1/20/2003	7/11/2002	1/21/2002	7/13/2001	07/01 DUP	1/17/2001
			Post-ISCO																			Pre-ISCO											
Field Parameters																																	
Conductivity	*	mS/cm	0.226	0.203	0.171	0.206	0.308	0.305	0.327	0.206	2.24	0.243	0.214	0.249	0.65	0.252	0.230	0.229	0.237	0.214	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.45	0.89	0.37	0.44	0.53	0.14	0.74	0.73	6.88	0.41	3.38	2.59	6.75	0.49	0.62	0.28	0.46	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-73.5	-49.8	-74.0	-144.8	-61.5	-106.2	-144.2	-48.9	-62	-78	-44.6	-253.5	-76.8	-118	-90.9	-69.2	-85.3	-71	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.51	6.34	6.76	6.79	6.65	6.45	6.81	6.36	0.254	6.68	6.9	12.81	0.24	6.66	6.71	6.80	6.8	6.85	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.6	21.45	20.82	22.67	17.32	25.62	17.77	24.38	16.97	23.8	16.51	26.37	19.15	24.23	20.72	24.61	18.94	22.99	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.19	2.51	3.21	1.37	3.60	7.22	6.42	9.3	2.18	1.25	7.63	3.2	5.3	1.23	0.09	0.69	2.55	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																	
Carbon Dioxide	*	µg/L	108	101	125	107	28	40	380 B	300 B	220 *	310 JB	260	270 *	250	270	< 1000	< 1000	--	240	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.09	2.04	1.55	1.4	2.6	4.5	0.46	0.99	2	1.8	1.8	1.7
Iron, as Ferrous (Fe+2)	*	mg/L	2.56	< 0.100	0.149 H	0.518 H	0.43 HF	2.0 HF	1.3 HF	0.41 HF	0.59 HF	1.1 HF	1.0 HF	1.0 HF	0.12 HF	1.4	2.48	2.41	2.17	1.87 H	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.722	0.644	0.655	0.73	0.74	0.95	0.49	0.6	0.7	0.68	0.69	0.72
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.604	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	410	< 4	650	680	2,400	3,600	1,600	24	37	46	230	190	100	32	140	160	140	100	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	ma/L	< 0.25	0.42	<0.25	<0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	<1.1	< 1.1	< 1.1	< 0.050	<0.50	< 0.25	< 0.25	< 0.25	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.17 H	7.95 H	5.55 H	6.75 H	5.0	3.7	1.2	1.7	2.2	1.5	1.4	1.4	1.3	1.3	2.0	1.8	1.8	2.8	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	< 1.0	26	<1.0	<1.0	< 5.0	< 5.0	< 2.6	< 2.6	< 2.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	1.1	1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																	
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 UJ
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	**0.49 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	**0.2 J**	**0.21 J**	**0.29 J**	
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	0.123	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	1.0 U	1.0 U	1.0 U	0.12 U	
Methylene Chloride	5	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.61 J**	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.32 J**	2.0 U	2.0 U	2.0 U	2.0 U	
Semivolatile Organic Compounds																																	
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(a)pyrene	0.2	ua/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(b)fluoranthene	0.2	ua/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.043	< 0.049	< 0.046	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Dibenzofuran	1	µg/L	--	--	--	--	< 0.23	< 0.19	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Fluorene	1,000	ua/L	< 0.10	< 0.10	< 0.10	< 0.10	--	--	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Indeno/1.2.3-cd)pyrene	0.4	ua/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Naphthalene	20	ua/L	< 500	< 0.50	< 0.50	< 0.50	< 0.23	< 0.19	**1.0**	< 0.11	**1.1**	< 0.19	< 0.19	< 0.19	**0.037 J**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Phenanthrene	10	µg/L	<0.50	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U		
Inorganic Compounds																																	
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.234**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.032 B**	**0.047 B**	**0.046 B**	**0.043 B**	0.2 U		
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0071 J**		
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0053 B**	0.01 U		
Barium	2	mg/L	**0.338**	**0.0362**	**0.324**	**0.241**	**0.28**	**0.15**	**0.22**	**0.34**	**0.12**	**0.82**	**0.33**	**0.35**	**0.33**	**0.33**	**0.350**	**0.315**	**0.284**	**0.306**	**0.264**	**0.251**	**0.25**	**0.29**	**0.17**	**0.27**	**0.3**	**0.33**	**0.3**	**0.31**	**0.31**		
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00020 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00098 U	
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	**0.0213**	< 0.0050	**0.025**	**0.016**	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	**0.008**	**0.00077 B**	**0.00084 B**	0.005 U	0.005 U	0.005 U	**0.0012 J**		
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**18.8**	**20.8**	**22**	**19**	**22**	**18**	**18**	**18**	**17**	**18**	**17**		
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0012 J**	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0032 B**	0.01 U	0.01 U	0.01 U		
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0019 B**	**0.0028 B**	**0.003 B**	**0.0035 B**	**0.0027 B**	**0.0032 J**		
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	**0.0025 J**	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0022 B**	**0.0015 B**	**0.0016 B**	0.02 U	0.02 U	0.02 U		
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.015**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0030 J**	**0.0031 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0026 U		
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.31**	**9.3**	**8.6**	**9.2**	**5.2**	**8.9**	**9**	**9.7**	**9.1**	**9.2**	**8.9**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000084	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00011 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U		
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0036 J**	**0.0028 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0025 J**	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.99**	**3.3**	**4.2**	**33**	**5**	**3.6**	**2.6**	**2.6**	**2.6**	**2.9**			
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**12.8**	**14.4**	**13**	**13**	**5.5**	**13**	**13**	**14**	**13**	**13**	**13**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	**0.00037 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U	0.002 U		
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0061 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.110**	< 0.0200	<0.020	**0.064**	**0.018 J**	**0.022**	< 0.0087	<0.020	<0.020	**0.032**	**0.013 J**	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	**0.066**	**1.2**	**0.032**	**0.025**	0.02 U	0.02 U	**0.015 B**	**0.052**		

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-303																													
		Sample Date	1/13/2015	7/15/2014	1/8/2014	7/9/2013	1/7/2013	7/23/2012	1/17/2012	7/5/2011	1/17/2011	7/15/2010	1/5/2010	7/22/2009	1/14/2009	7/17/2008	1/9/2008	7/11/2007	2/15/2007	7/12/2006	2/8/2006	1/11/2006	7/22/2005	1/20/2005	7/14/2004	1/20/2004	7/17/2003	1/15/2003	7/10/2002	1/22/2002	7/10/2001	1/18/2001
		Unit	Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.545	0.553	0.563	0.671	0.680	0.767	0.649	0.687	2.16	0.668	0.632	0.713	0.76	0.842	0.799	0.805	0.874	0.846	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.57	0.24	0.20	0.14	0.58	0.57	3.50	1.16	5.96	0.43	0.36	0.19	5.45	0.39	7.99	0.42	0.26	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-4.2	-26.9	-12.3	43.5	13.6	46.6	138.0	36.7	-13.1	-132.5	21	68.6	84.8	66.7	103.7	118.9	86.3	124.6	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.69	6.04	5.97	5.96	5.99	5.11	5.80	5.03	6.66	5.88	6.23	5.53	0.84	5.45	5.81	5.57	5.73	5.93	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.5	23.36	21.66	24.28	22.32	26.96	23.35	24.18	19.83	25.41	17.36	25.16	21.65	26.29	22.84	23.60	21.37	24.43	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.24	6.03	2.35	1.72	1.78	9.05	6.8	5.42	0.79	8.6	2.81	2.1	1.2	6.26	0.08	0.00	0.82	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	168	207	388	314	240	240	3,400 B	3,400 B	2,700 *	3,500 JB	3,000	3,600 *	3,900	3,800	< 1000	< 1000	--	1,700	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	--	0.463	0.397	0.67	0.69	0.98	1	1.9	2.5	1.8	1.5	1.1
Iron, as Ferrous (Fe+2)	*	mg/L	6.83	10	9.78	8.34	8.6 HF	10 HF	2.5 HF	12 HF	13 HF	10 HF	9.6 HF	7.1 HF	9.6 HF	6.6	2.41	0.87	0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.417	--	0.845	0.792	0.83	0.69	0.59	0.54	0.59	0.69	0.54	0.54	0.43
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.368	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	150	170	100	100	21	38	23	53	52	54	25	13	6.7	0.49	10	18	9	0.94	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.075	0.19 J	< 0.075	< 0.36	<1.1	< 1.1	< 1.1	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25	0.49	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen. ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.89 H	7.08 H	8.16 H	6.96 H	5.2	5.6	1.1	1.2	1.3	1.2	1.2	0.84	0.86	0.89	1.8	1.9	1.5	1.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	< 1.0	77	76	120	140	140	120	150	120	110	150	160	170	210	210	200	210	150	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	**67**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	**9.0**	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.13 J**	**3.5**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.4 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	**0.34 J**	5.0 U	5.0 U	5.0 U
Toluene	1,000	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.41 J**	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.26 J**	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.49 J**	**0.93 J**	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	ua/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.11	< 0.095	< 0.12	**0.64**	**1.3**	< 0.94	**0.61**	**0.23**	**0.024 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.33 J**	**30**	10 U	10 U
Acenaphthylene	10	ua/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.11	< 0.095	**0.21 J**	**0.31**	**0.56**	< 0.94	**0.36**	**0.22**	**0.076 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	**0.087**	**0.18**	**0.14**	**0.13**	< 0.20	< 0.11	**0.12 J**	**0.25**	**0.23**	**0.26**	< 0.94	< 0.19	**0.14 J**	**0.095 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.048	< 0.043	< 0.056	< 0.047	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**0.8 J**	10 U	10 U
Fluoranthene	1,000	µg/L	**0.11**	**0.14**	**0.10**	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	**0.15 J**	**0.36**	**0.44**	< 0.94	< 0.19	**0.11 J**	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	< 0.50	< 0.20	< 0.11	**0.80**	< 0.12	**0.25**	**2**	**46 B**	**1.2**	**0.63**	**0.049 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	1	< 0.19	**0.088 J**	**0.043 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**1.2 J**	10 U	10 U
Pyrene	1,000	µg/L	**0.11**	**0.11**	**0.072**	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	**0.076 J**	**0.061 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.209**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	**0.04 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0888**	**0.0945**	**0.0943**	**0.113**	**0.14**	**0.14**	**0.14**	**0.14**	**0.14**	**0.12**	**0.12**	**0.14**	**0.16**	**0.24**	**0.230**	**0.193**	**0.226**	**0.22**	--	0.2 U	**0.178**	**0.25**	**0.24**	**0.22**	**0.22**	**0.25**	**0.24**	**0.23**	**0.24**	**0.23**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	**0.00041 J**	**0.00025 J**	**0.00056 J**	**0.00053 J**	**0.00044 J**	< 0.0040	< 0.0040	**0.00069 J**	**0.00085 J**	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	**0.0051**	< 0.0020	**0.0029 J**	< 0.0050	< 0.0050	< 0.0050	**0.00064 J**	**0.00096 J**	< 0.0050	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**43.8**	**43.2**	**48**	**46**	**41**	**37**	**40**	**39**	**41**	**41**	**37**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0013 J**	< 0.010	< 0.010	< 0.010	**0.0015 J**	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0022 B**	0.01 U	**0.0023 B**	**0.002 B**	**0.0017 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	**0.0025 J**	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	**0.00091 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.017**	< 0.0050	< 0.010	**0.013**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40.7**	**39.6**	**45**	**43**	**39**	**37**	**37**	**34**	**38**	**39**	**35**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0073 J**	**0.0065 J**	**0.0064 J**	**0.0060 J**	**0.0046 J**	< 0.040	< 0.040	**0.0070 J**	**0.0079 J**	< 0.0200	**0.0291**	< 0.02	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	< 0.0100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	**1.4**	**1.3**	**1.3**	**1.4**	**1.4**	**1.5**	**1.9**	**1.3**	**4.2**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**56.1**	**66.6**	**75**	**61**	**49**	**51**	**51**	**42**	**42**	**50**	**49**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	**0.00029 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.0010 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0021 J**	**0.0032 J**	< 0.0100	< 0.010	**0.0779**	**0.109**	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	<0.020	**0.0088 J**	**0.061**	< 0.0087	**0.022**	<0.020	<0.020	**0.026**	**0.032**	**0.038**	**0.0238**	< 0.02	< 0.02	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.0071 B**	**0.0066 B**	**0.012 B**	0.02 U	**0.032**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-304																																	
			1/15/2015	7/15/2014	1/8/2014	7/11/2013	1/8/2013	7/25/2012	1/18/2012	7/5/2011	1/18/2011	7/14/2010	1/6/2010	7/23/2009	1/20/2009	7/15/2008	1/9/2008	7/12/2007	2/15/2007	02/07 DUP	7/12/2006	07/06 DUP	1/16/2006	7/22/2005	1/21/2005	7/14/2004	7/14/2004	1/24/2004	1/24/2004	7/20/2003	1/20/2003	7/17/2002	4/4/2002	1/22/2002	7/16/2001	1/17/2001
			Post-ISCO																					Pre-ISCO												
Field Parameters																																				
Conductivity	*	mS/cm	0.448	0.576	0.461	0.561	0.417	0.470	0.470	0.530	0.466	0.533	0.451	0.581	0.366	0.494	0.619	0.547	0.622	0.622	0.474	0.474	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.32	0.18	1.08	0.32	0.66	0.45	0.45	0.16	1.22	0.62	10.14	0.27	0.56	0.6	0.29	0.31	0.14	0.14	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-47.1	-54.7	-44.1	-31.4	6.9	-56.1	-56.1	-32.3	-42.6	-106.7	-36.4	-1.2	-8	-89.7	-46.9	-35.8	-28.5	-28.5	-34.3	-34.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.04	6.1	6.30	6.02	6.35	6.11	6.11	6.11	6.36	6.15	7.06	6.04	5.96	5.86	5.96	6.05	6.13	6.13	6.02	6.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	14.6	24.25	16.89	20.51	16.64	16.26	16.26	25.14	16.43	21.47	12.77	20.34	15.39	14.44	18.28	20.01	17.34	17.34	20.11	20.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.94	0.69	8.31	0.95	2.09	9.93	9.93	1.74	9.19	9.1	8.09	4.8	3	1.42	0.00	4.5	0.84	0.84	3.39	3.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																				
Carbon Dioxide	*	µg/L	305	202	560	352	120	240	3,100 B	2,800 B	2,800	2,500 JB	1,500	2,600	1,400	2,700	< 1000	< 1000	--	--	2,700	2,600	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40.1	41.1	42.2	41.1	43	42	43	39	42	40	40	43	--	40	40	41
Iron, as Ferrous (Fe+2)	*	mg/L	32.7	32.7	41.9	42.8 H	40 HF	37 HF	16 HF	25 HF	38 HF	--	32 HF	32 HF	2.2 HF	36	43.5	39.1	43.8	43.5	42.2	42.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7,000	1.67	1.64	1.6	1.4	1.6	1.6	1.6	1.4	1.5	1.4	1.4	1.5	--	1.4	1.4	1.4
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25	1.41	1.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	6,700	3700	7,400	6,400	1,900	6,000	5,800	3,100	--	5,000	1,100	6,200	1,800	3,300	6,800	7,600	7,200	7,000	5,700	6,900	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L		< 0.25	<0.25	<0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	< 1.1	< 1.1	< 1.1	0.048 J	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	3.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.48 H	5.52 H	6.33 H	5.28 H	5.2	3.5	1.1	1.4	1.2	1.3	1.4	0.87	1.2	0.89	1.7	0.81	1.7	3.4	1	0.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L		< 1.0	<1.0	<1.0	< 5.0	< 5.0	< 2.6	< 2.6	< 2.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1	< 1	< 1	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2	< 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																				
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 25	< 25	**45 J**	< 500	< 100	< 100	< 100	< 50	< 50	< 50 R	< 50	50 R	50 R	80 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	--	25 U	25 U	25 U
Benzene	5	µg/L	**27**	**91**	**27**	**76**	**10**	**43**	**140**	**620**	**410**	**480**	**800**	**340**	**31**	**160**	**130**	**580**	**470**	**460**	**430**	**440**	**0.2**	**4.6**	**24**	**22**	**26**	**18**	**2**	**1.6**	**25**	1.0 U	**32**	**46**	**34**	**34**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 3.0	< 3.0	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 250	< 5.0	**13**	**28**	<5.0	**36**	**0.97 J**	**2.5 J**	< 0.55	**1.3 J**	< 25	< 5.0	**1.7 J**	**1.8 J**	< 5.0	< 5	**8.8**	**7.7**	**5.4**	**10**	**8.0**	**36**	**67**	**76**	**94**	**75**	**79**	**59**	**110**	1.0 U	**120**	**250 D**	**150**	**140**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 5.0	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.36 J**	5.0 U	5.0 U	5.0 U	5.0 U	**0.67 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 1.7	< 1.6	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	1.0 U	**12**	1.0 U	**13**	1.0 U	1.0 U	1.0 U	**11**	1.0 U	**26**	**62**	**33**	**36**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.65	< 0.65	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.23 J**	**0.41 J**	
Xylenes, total	2,000	µg/L	**9.6**	< 5.0	**26**	**29**	<5.0	**43**	**14**	**10 J**	**9.5 J**	**15 J**	**34**	**8.8**	**5.8**	**17**	**19**	**8.4**	**38**	**37**	**12 J**	**21 J**	16 U	**43**	**66**	**50**	**56**	**43**	**43**	**36**	**50 B**	2.0 U	--	**110**	**94**	**83**
Semivolatile Organic Compounds																																				
2-Methylnaphthalene		µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**19**	**2.1**	**87**	**73**	**76**	**59**	**65**	**56**	**82**	**74**			**100**	**96**	**150**
Acenaphthene	2,000	µg/L	**31**	**34**	**32**	**53**	**31**	**58**	**71**	**4.2**	**28**	**25**	**48**	**29**	**23**	**18**	**44**	< 10	**47**	**47**	**37**	**44**	**38**	**3.6**	**80**	**75**	**78**	**47**	**50**	**68**	**58**	**52**	**98**	**59**	**70**	**120**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<20	< 4.3	< 0.11	< 0.10	**0.21**	**0.16 J**	< 4.0	< 0.39	**0.27**	**0.28**	< 10	< 10	< 10	< 10	< 10	< 10	0.2 U	0.2 U	10 U	10 U	10 U	**0.29**	0.2 U	10 U	**0.57 J**	10 U	40 U	50 U	**1.0 J**	**1.8 J**
Anthracene	10	µg/L	**0.54**	**0.46**	**0.93**	**1.1**	<20	< 4.3	**0.50**	< 0.10	**0.27**	**0.24**	< 4.0	**0.47**	**0.33**	**0.51**	< 10	< 10	< 10	< 10	< 10	< 10	**0.59**	0.2 U	10 U	10 U	10 U	**1.6**	**16**	10 U	**0.18 J**	**2**	**2.7 J**	50 U	**2.2 J**	**3 J**
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 10	< 10	< 10	< 10	< 10	< 10	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	**0.95 JB**	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 10	< 10	< 10	< 10	< 10	< 10	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.048	< 0.046	< 0.045	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	**0.86 JB**	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	10 U	10 U	10 U	**1.7**	**2.0**	10 U	**2.1 J**	**21 J**	--	**2.3 J**	**2.6 J**	**4.3 J**
Fluoranthene	1,000	µg/L	**0.40**	**0.43**	**0.54**	**0.62**	<20	< 4.3	**0.39**	< 0.10	**0.20**	**0.21**	< 4.0	< 0.39	**0.24**	**0.29**	< 10	< 10	< 10	< 10	< 10	< 10	**0.45**	0.2 U	10 U	10 U	10 U	**0.76**	**0.76**	10 U	**0.84 J**	**0.95 J**	40 U	50 U	**0.78 J**	10 U
Fluorene	1,000	µg/L	**4.4**	**3.5**	**5.8**	**6.6**	<20	**8.4**	**5.0**	**0.50**	**3.0**	**2.3**	**6.4**	**2.6**	**2.7**	**3.9**	< 10	< 10	< 10	< 10	< 10	< 10	**4.3**	**0.42**	**13**	**11**	**12**	**11**	**12**	**13**	**11**	**11**	**18 J**	**9.3 J**	**13**	**21**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.064**	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	**0.77 JB**	10 U
Naphthalene	20	µg/L	**27**	**12**	**65**	**280**	**300**	**430**	**98**	**20**	**50**	**110**	**190**	**21**	**17**	**76**	**110**	< 10	**190**	**180**	**160**	**210**	**87**	**35**	**700**	**560**	**580**	**450**	**500**	**400**	**620**	**570 D**	**1,300 D**	**980**	**880 D**	**1,200 D**
Phenanthrene	10	µg/L	**3.2**	**2.1**	**5**	**5.7**	<20	**7.2**	**3.0**	**0.18 J**	**1.5**	**1.2**	**5.5**	**1.6**	**1.7**	**2.4**	< 10	< 10	< 10	< 10	< 10	< 10	**3.0**	**0.24**	**10**	**10**	**11**	**9.4**	**9.3**	**11**	**11**	**11**	**16 J**	**11 J**	**12**	**19**
Pyrene	1,000	µg/L	**0.42**	0.45	**0.52**	**0.54**	<20	< 4.3	**0.40**	< 0.10	**0.28**	**0.25**	< 4.0	< 0.39	**0.24**	**0.37**	< 10	< 10	< 10	< 10	< 10	< 10	**0.51**	0.2 U	10 U	10 U	10 U	**0.76**	**0.83**	10 U	**0.95 J**	**0.81 J**	40 U	50 U	**0.92 J**	**1.2 J**
Inorganic Compounds																																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.084 B**	--	0.2 U	**0.1 B**	**0.2 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.01 U	0.006 U	0.02 U	0.006 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.050	< 0.050	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	<0.0500	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.324**	**0.367**	**0.395**	**0.407**	**0.37**	**0.38**	**0.38**	**0.35**	**0.34**	**0.38**	**0.34**	**0.36**	**0.32**	**0.35**	**0.346**	**0.348**	**0.372**	**0.363**	**0.382**	**0.39**	**0.382**	**0.354**	**0.38**	**0.4**	**0.4**	**0.36**	**0.38**	**0.33**	**0.39**	**0.4**	--	**0.38**	**0.37**	**0.39**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	**0.0017 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**25.4**	**24.1**	**25**	**24**	**25**	**25**	**26**	**24**	**25**	**26**	--	**24**	**24**	**22**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0026 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0074 B**	**0.0085 B**	--	**0.0085 B**	**0.0077 B**	**0.0087 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0057 J**	**0.0035 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	--	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	**0.009 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.013**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**17.1**	**14.5**	**16**	**15**	**16**	**15**	**16**	**15**	**16**	**16**	--	**16**	**16**	**15**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00012 B**	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.36**	**3.7**	**3.8**	**3.9**	**3.4**	**3.6**	**4**	**3.7**	**4**	--	**3.8**	**3.6**	**3.9**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**37.3**	**36.9**	**34**	**36**	**37**	**36**	**37**	**39**	**40**	--	--	**37**	**39**	**41**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	< 1	< 1	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 UWN	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	**0.0041 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0033 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	**0.010 J**	< 0.020	< 0.020	**0.016 J**	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.02 U	0.02 U	--	0.02 U	0.02 U	**0.0059 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306S																		
		Sample Date	2/14/2007	2/8/2006	1/12/2006	7/22/2005	07/05 DUP	1/20/2005	01/05 DUP	7/15/2004	07/04 DUP	1/22/2004	1/04 DUP	7/18/2003	7/03 DUP	1/15/2003	1/03 DUP	7/10/2002	1/15/2002	7/11/2001	1/22/2001
		Unit	Post-ISCO			Pre-ISCO															
Field Parameters																					
Conductivity	*	mS/cm	1.065	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	mV	6.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	SU	96.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	18.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																					
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	0.143	0.1 U	0.1 U	0.13	0.13	0.063	0.081	0.086	0.054	0.04 U	0.05	0.051	0.062	--	0.54 N	1.9	2.5 N
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	1.71	1.47	1.44	2	2.1	2.1	2.1	2.2	2.2	1.5	1.6	1.4	1.4	--	2.6	6.2 N	7.8
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																					
Acetone	4,000	µg/L	< 50	--	140 U	50 U	50 U	120 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.11 J**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5	9.1 U	25 U	10 U	10 U	25 U	5.0 U	5.0 U	5.0 U	50 U	50 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.82 J**	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5	--	29 U	4.0 U	4.0 U	10 U	2.0 U	2.0 U	2.0 U	20 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																					
2-Methylnaphthalene	*	µg/L	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.36 J**	**0.53 J**
Benz(a)anthracene	0.1	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.61 J**	**0.84 J**
Fluorene	1,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**1.4 J**	**2.5 J**
Pyrene	1,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																					
Aluminum (fume or dust)	*	mg/L	--	--	**1.99**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	--	**0.061 BN**	0.2 U	**0.033 B**
Antimony	0.01	mg/L	< 0.02	--	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	--	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.05	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	--	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.119**	--	0.2 U	**0.129**	**0.133**	**0.13**	**0.13**	**0.17**	**0.16**	**0.17**	**0.17**	**0.17**	**0.17**	**0.23**	**0.23**	--	**0.20**	**0.22**	**0.23**
Beryllium	0.004	mg/L	< 0.010	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.0040 U	--	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.005	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	--	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**124**	**136**	**141**	**130**	**130**	**160**	**150**	**170**	**170**	**190**	**160**	**160**	**160**	--	**140**	**150**	**160**
Chromium	0.1	mg/L	< 0.010	--	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.010 U	0.010 U	--	0.010 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0023 B**	**0.0025 B**	--	**0.0036 B**	**0.0063 B**	**0.0067 B**
Copper	1.3	mg/L	< 0.010	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0018 U	**0.0026 B**	--	**0.0013 B**	0.02 UN	**0.0014 B**
Cyanide	0.2	mg/L	< 0.010	--	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.010 U	0.010 U	--	0.010 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	--	0.0050 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	**38.4**	**39.8**	**41.3**	**39**	**39**	**48**	**47**	**52**	**51**	**52**	**52**	**48**	**48**	--	**44**	**47**	**47**
Mercury	0.002	mg/L	< 0.0002	--	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 UJ	**0.00011 B**	**0.000096 B**	--	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.02	--	0.04 U	**0.0442**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.044**	**0.043**	--	**0.022 B**	0.04 U	**0.0061 B**
Potassium	*	mg/L	--	--	**20.9**	**21.8**	**22.9**	**20**	**20**	**25**	**24**	**25**	**25**	**34**	**34**	**22**	**22**	--	**20**	**23**	**21**
Selenium	0.05	mg/L	< 0.02	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	--	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**64.3**	**74.3**	**76.7**	**75**	**77**	**90**	**89**	**83**	**80**	**90**	**88**	**48**	**48**	--	**63**	**52**	**54**
Thallium	0.002	mg/L	< 1	--	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.0020 UJ	0.0020 UWN	--	0.0020 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.010	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0031 B**	**0.0030 B**	--	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.02	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.03**	**0.0092 B**	**0.0088 B**	--	**0.0085 B**	**0.0097 B**	**0.013 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-306D																																
			1/13/2015	7/14/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/17/2012	7/5/2011	1/18/2011	7/20/2010	1/6/2010	7/21/2009	01/19/2009	07/22/2008	1/8/2008	7/10/2007	2/15/2007	02/07 DUP	7/11/2006	2/8/2006	1/12/2006	7/22/2005	1/20/2005	7/15/2004	1/22/2004	7/19/2003	1/15/2003	7/9/2002	1/15/2002	7/11/2001	1/22/2001
			Post-ISCO																				Pre-ISCO												
Field Parameters																																			
Conductivity	*	mS/cm	0.635	0.653	0.804	1.480	1.429	1.521	1.215	1.107	0.656	0.678	1.572	1.395	1.430	0.925	0.798	0.620	0.685	0.685	0.543	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.21	1.82	0.22	0.17	3.71	1.70	0.32	0.28	0.45	6.8	0.32	6.18	0.27	0.73	0.28	0.24	0.28	0.28	2.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	10.7	28	-7.7	-14.3	-51.0	-5.9	97.0	-11.5	226	-6.7	-29.2	-53.4	-43.6	-14.8	10.6	36.2	-8.9	-8.9	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.94	6.06	6.24	6.07	6.41	5.76	4.07	6.15	5.71	6.89	6.15	8.12	6.11	6.19	6.00	6.13	6.15	6.15	5.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	19.1	21.37	20.04	22.36	20.71	21.64	20.15	25.84	19.24	25.41	18.62	21.99	19.78	22.07	21.81	22.03	19.62	19.62	21.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	3.61	2.85	1.24	3.15	1.90	1.66	0.92	0.62	8	4.17	0.88	0.62	0	1.2	2.10	0.00	0.21	0.21	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																			
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.59	8.94	7.3	4.3	7.2	6.7	28	28	24 N	25	23 N	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002 U	--	1.56	1.52	1.6	1.5	1.6	1.2	2.5	2.5	2.3	2.5 N	2.5	--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50 R	< 50	50 U	--	20 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.95	< 0.95	**0.56 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5 U	< 5	5 U	1.0 U	5.4 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	--	--
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	**0.36 J**	**0.43 J**	**0.36 J**	**0.55 J**	**0.91 J**	--	--
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	--	--
Anthracene	10	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	**0.032 J**	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.38 J**	--
Benz(a)anthracene	0.1	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(a)pyrene	0.2	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(b)fluoranthene	0.2	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(e,a,h,i)perylene	10	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(k)fluoranthene	10	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Chrysene	0.2	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.047	< 0.062	< 0.043	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Dibenzo(a,h)anthracene	0.3	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Dibenzofuran	1	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**0.3 J**	10 U	10 U	--	--
Fluoranthene	1,000	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	**0.044 J***	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.81 J**	--
Indeno(1,2,3-cd)pyrene	0.4	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Naphthalene	20	ug/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	**4.1**	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	**0.034 J**	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**1.2 J**	--
Pyrene	1,000	ug/L	< 0.050	< 0.050	**0.075**	**0.060**	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	**0.043 J**	**0.035 J**	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	--	--
Inorganic Compounds																																			
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	**0.043 BN**	0.2 U	0.2 U	--	--
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U	--	--
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0034 B**	0.01 U	0.010 U	**0.0036 B**	0.01 U	--	--
Barium	2	mg/L	**0.377**	**0.435**	**0.424**	**0.785**	**0.69**	**0.71**	**0.61**	**0.53**	**0.37**	**0.39**	**0.73**	**0.63**	**0.74**	**0.46**	**0.464**	**0.370**	**0.363**	**0.363**	**0.373**	--	**0.372**	**0.363**	**0.41**	**0.39**	**0.36**	**0.25**	**0.42**	**0.37**	**0.36**	**0.36**	**0.35**	--	--
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U	--	--
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U	--	--
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**37.4**	**41.6**	**39**	**37**	**39**	**30**	**51**	**50**	**46**	**50**	**48**	--	--
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0016 J**	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 UN	0.01 U	--	--
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0018 B**	0.01 U	0.010 U	0.01 U	0.01 U	--	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0023 J**	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 UN	**0.0017 B**	--	--
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0083 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	--	--
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	**0.0018 B**	0.005 U	--	--
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**37.8**	**37.3**	**36**	**34**	**35**	**27**	**38**	**37**	**34**	**37**	**35**	--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	--	--	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	--	--
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0029 J**	**0.0029 J**	**0.0029 J**	< 0.040	< 0.040	< 0.040	< 0.040	**0.0026 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	**0.0065 B**	0.040 U	0.04 U	--	--
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.27**	**3.8**	**2.8**	**3.4**	**3**	**3.8**	**4**	**4.0**	**4.4**	**4.3**	--	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.010 U	0.01 U	0.010 U	0.01 U	--	--
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**45.5**	**47.1**	**42**	**34**	**34**	**30**	**77**	**72**	**79**	**85**	**82**	--	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.0020 U	0.002 UW	0.002 UW	--	--
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	--	--
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.011 J**	< 0.0087	< 0.0087	**0.0096 J**	< 0.020	< 0.020	**0.012 J**	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.0076 B**	0.020 U	0.02 U	--	--

Notes:
-- - *Not analyzed*
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306SAP																		
		Sample Date	1/14/2015	7/15/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/17/2012	7/6/2011	1/18-19/2011	1/6/2010	7/21/2009	1/19/2009	7/22/2008	1/22/2004	1/16/2003	7/10/2002	1/16/2002	7/11/2001	1/24/2001
		Unit	Post-ISCO													Pre-ISCO					
Field Parameters																					
Conductivity	*	mS/cm	1.390	1.375	1.493	1.431	1.330	1.268	1.268	1.497	1.172	0.899	1.617	1.319	1.62	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.21	4.87	5.23	5.53	--	4.75	4.75	4.20	5.69	9.89	6.26	2.5	0.78	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-23.2	-3.6	-38.8	25.3	-34.0	128.7	128.7	2.0	5.31	-12.1	-71.9	6.03	1.5	--	--	--	--	--	--
pH	*	SU	6.06	6.43	6.47	6.10	6.44	3.84	3.84	6.34	220.0	6.29	6.6	11.7	6.15	--	--	--	--	--	--
Temperature	*	Celsius	15.40	25.72	16.77	21.87	19.92	15.83	15.83	24.26	15.19	13.66	30.52	16.04	25.77	--	--	--	--	--	--
Turbidity	*	NTU	12.80	33.3	28.6	90.4	18.00	20.9	20.9	22.9	21	NM	9.8	9.83	9.39	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																					
Carbon Dioxide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	1.1	18	16	10	17	16
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	1	3.9	3.8	4.9	4.0 N	4.0
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																					
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	2,500 U	**25**	25 U	25 U	**18 J**	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	0.57 J	< 5.0	< 5.0	< 5.0	< 5.0	**2,100**	**0.16 J**	1.0 U	1.0 U	**0.17 J**	**0.22 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	**290**	**0.11 J**	**0.29 J**	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.8 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	100 U	**4.0 J**	1.0 U	1.0 U	**0.29 J**	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	100 U	**0.2 J**	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	200 U	**0.13 J**	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																					
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**44**	10 U	10 U	14 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	**0.041 J***	**0.038 J**	**19**	10 U	**0.32 J**	14 U	10 U	**0.27 J**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**0.21**	10 U	10 U	14 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**0.28**	10 U	10 U	14 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	**0.38**	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.043	< 0.045	< 0.045	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**	10 U	10 U	14 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	**0.023 J***	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**2.3**	10 U	10 U	14 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	**0.23**	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Naphthalene	20	µg/L	**0.66**	< 0.50	< 0.50	< 0.50	< 0.22	< 0.20	**0.18 J**	< 0.099	**0.14 J**	< 0.19	< 0.20	**0.099 J**	**0.083 J**	**390**	10 U	10 U	14 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**2.2**	10 U	10 U	14 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Inorganic Compounds																					
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	**3.1**	**0.1 B**	**0.029 B**	0.2 U	**0.71**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.010	< 0.010	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.648**	**0.657**	**0.666**	**0.654**	**0.63**	**0.78**	**0.68**	**0.63**	**0.68**	**0.63**	**0.65**	**0.67**	**0.71**	**0.32**	**0.59**	**0.56**	**0.61**	**0.52**	**0.53**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00029 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	0.004 U	0.0040 U	**0.00054 B**	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**27**	**61**	**57**	**69**	**59**	**56**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	**0.42**	**0.0024 J**	**0.0013 J**	**0.0091 J**	< 0.010	< 0.010	**0.0056 J**	< 0.010	0.01 U	**0.034**	0.01 U	0.01 U	0.01 UN	**0.0039 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	**0.0060 B**	**0.0042 B**	**0.0035 B**	**0.0044 B**	**0.0025 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0026 JB**	< 0.020	< 0.020	< 0.020	< 0.020	0.02 U	**0.0054 B**	0.02 U	0.02 U	0.02 UN	**0.0014 B**
Cyanide	0.2	mg/L	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**14**	**35**	**33**	**40**	**34**	**33**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.151**	**0.378**	**0.315**	**0.305**	**0.59**	**0.59**	**0.30**	**0.27**	**0.38**	**0.36**	**0.20**	**0.027 J**	**0.034 J**	0.04 U	**0.024 B**	**0.018 B**	**0.032 B**	**0.026 B**	**0.029 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**	**3.8**	**3.9**	**3.5**	**3.7**	**3.7**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.010	< 0.010	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**25**	**210**	**140**	**120**	**160**	**150**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.001 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	**0.010**	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	**0.0055 B**	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	**0.099**	< 0.0087	**0.0087 J**	**0.0099 J**	< 0.020	< 0.020	**0.011 J**	< 0.020	**0.051**	**0.0067 B**	**0.009 B**	0.02 U	0.02 U	**0.0076 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-307D																																
			1/29/2015	7/15/2014	1/7/2014	7/10/2013	1/8/2013	7/23/2012	1/16/2012	7/6/2011	1/18/2011	7/14/2010	1/7/2010	7/21/2009	1/19/2009	7/16/2008	1/9/2008	7/11/2007	2/14/2007	7/12/2006	1/11/2006	7/22/2005	1/19/2005	7/16/2004	1/23/2004	7/17/2003	1/15/2003	1/03 DUP	7/9/2002	1/16/2002	7/10/2001	1/22/2001
			Post-ISCO																			Pre-ISCO													
Field Parameters																																			
Conductivity	*	mS/cm	0.457	0.55	0.546	0.446	0.536	0.392	0.498	0.498	0.457	0.490	0.411	0.487	0.534	0.574	0.622	0.456	0.563	0.505	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.64	0.34	0.13	0.12	0.31	0.40	1.91	2.02	0.67	0.29	1.2	0.25	0.27	0.3	0.21	0.22	0.25	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	1.9	-70.6	-57.0	-30.3	-30.2	-25.6	-74.6	-43.1	-53.7	-56.8	-0.6	-29.9	-64.6	-88.8	-74.4	-67.4	-84.5	-65.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.43	6.58	6.47	6.76	6.47	6.25	6.36	6.58	6.57	6.24	6.01	6.38	6.26	6.21	6.25	6.33	6.42	6.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	19.53	22.36	19.99	22.26	19.98	23.40	20.27	21.22	18.21	22.02	17.98	20.74	19.7	21.17	20.40	22.15	19.14	22.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	4.28	1.87	4.91	2.82	0.72	5.02	9.70	1.81	3.34	9.7	3.57	4.9	7.76	3.87	4.90	4.8	1.43	1.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																			
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.2	16.8	15	15	28	2.3	1.7	3.6	1.5	1.8	1.7	0.31 N		
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.499	0.616	0.62	0.68	1.2	0.33	0.21	2.0	0.17	0.27	0.37	0.49		
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	<100	< 5.0	< 5.0	< 5.0	< 5.0	**7.5 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U	1.0 U	1.0 U	**0.18 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**	
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.3 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	**3.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	0.002 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.057**	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.044	< 0.050	< 0.049	< 0.049	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	**0.35**	< 0.19	< 0.19	< 19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**11**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	**0.079**	< 0.050	**0.065**	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																			
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.048 B**	**0.11 B**	0.2 U	**0.11 B**	**2.1**	0.2 U			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.020 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U		
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U		
Barium	2	mg/L	**0.0712**	**0.258**	**0.0751**	**0.0638**	**0.29**	**0.061**	**0.068**	**0.064**	**0.061**	**0.065**	**0.062**	**0.065**	**0.069**	**0.072**	**0.147**	**0.0767**	**0.112**	**0.112**	0.2 U	**0.126**	**0.1**	**0.098**	**0.15**	**0.07**	**0.065**	**0.14**	**0.068**	**0.12**	**0.1**	**0.1**			
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U		
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	**0.00091 B**	0.005 U	0.005 U	0.005 U			
Calcium metal	*	mo/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40**	**44.6**	**33**	**35**	**49**	**28**	**24**	**70**	**21**	**31**	**30**	**30**			
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	**0.0030 J**	< 0.010	< 0.010	**0.0015 J**	**0.0016 J**	**0.0178**	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	**0.010**	0.01 U	**0.004 B**	**0.0034 B**	0.01 U				
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0028 B**	**0.0059 B**	**0.0024 B**	**0.002 B**	**0.0023 B**	**0.0016 B**			
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0165**	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0011 B**	**0.0010 B**	**0.0012 B**	0.02 U	**0.0021 B**	0.02 U			
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0089 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U			
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0184**	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	0.005 U	0.005 U	**0.0015 B**	0.005 U			
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.5**	**26.2**	**22**	**23**	**19**	**23**	**19**	**43**	**18**	**25**	**22**	**23**			
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00091	< 0.00091	< 0.00091	< 0.00091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.102**	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.00020 U	0.00020 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U			
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0049 J**	**0.0059 J**	**0.0045 J**	< 0.0023	**0.0093 J**	< 0.040	< 0.040	**0.0030 J**	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.21**	**0.11**	**0.0083 B**	**0.1**	0.11	**0.0064 B**	**0.0067 B**		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**19.8**	**6.01**	**2.8**	**2.2**	**11**	**0.8**	**0.62 B**	**3.0**	**0.73 B**	**1**	**1.2**	**1.1**		
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	**0.0073 J**	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U			
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**34.5**	**85.6**	**62**	**54**	**49**	**54**	**51**	**140**	**60**	**78**	**62**	**62**			
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.0020 UWN	0.002 UWN	0.002 U	0.002 U	0.002 UW			
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0172**	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	**0.0055 B**	0.01 U			
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0554**	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	0.02 U	0.02 U	**0.0059 B**	0.02 U			

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Orqanic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-307SAP																								
		Sample Date	1/13/2015	7/15/2014	1/7/2014	7/10/2013	1/9/2013	7/24/2012	1/16/2012	7/6/2011	1/18-20/2011	1/7/2010	7/21/2009	1/15/2009	7/16/2008	1/9/2008	7/12/2006	1/11/2006	7/22/2005	1/19/2005	7/16/2004	1/23/2004	7/17/2003	7/9/2002	1/16/2002	7/10/2001	1/22/2001
		Unit	Post-ISCO																Pre-ISCO								
Field Parameters																											
Conductivity	*	mS/cm	0.564	0.616	0.673	0.632	0.525	0.617	0.580	0.728	--	0.67	0.78	0.768	0.742	0.769	0.937	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.37	0.48	6.09	0.34	8.33	10.52	0.88	0.27	--	3.93	0.7	0.85	1	1.13	0.56	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	34.3	-13.4	-8.0	28.7	-10.9	7.2	-0.5	55.2	--	19.1	87.9	138.9	79.4	147.2	14.8	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.06	6.46	7.02	6.44	6.73	6.69	6.39	6.35	--	6.2	6.29	6.05	6.14	6.06	6.22	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.6	23.9	15.61	22.58	16.89	28.44	18.17	28.54	--	17.23	21.83	15.7	22.43	19.81	22.59	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.39	0.47	3.33	0.58	2.23	26.1	1.17	0.65	--	4.01	4.5	0.35	1.08	2.10	0.47	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																											
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.37	2.75	3	3.3	4.4	3	3.3	4.3	3.4	4.1
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.37	1.37	1.6	1.8	2	2.1	2	2.1	2.7	3.3
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	0.55 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	**0.16 J**	**0.34 JB**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.9 J**	1.0 U	
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.34 J**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.18 J**	2.0 U	2.0 U
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.20	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.25 J**	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	**0.16 J**	< 0.10	**0.48**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.054**	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.29**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.63**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	**1.0**	< 0.10	**0.52**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.27**	< 0.19	< 0.20	< 0.19	< 0.10	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	**0.82**	< 0.10	**0.23**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	**0.40**	< 0.10	**0.31**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.049	< 0.050	< 0.045	**0.49**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.20	< 0.19	< 0.20	< 0.19	< 0.10	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	< 0.19	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.88**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	--	< 0.11	< 0.11	< 0.10	< 0.20	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	**0.79**	< 0.10	**0.25**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	**0.11 J**	< 0.10	< 0.20	< 0.19	**0.063 JB**	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.99 J**	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**1.1**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.92**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.258**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.038 B**	**0.14 B**	**0.065 BN**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0032 B**	0.01 U	**0.0039 B**	0.01 U
Barium	2	mg/L	**0.0649**	**0.071**	**0.0697**	**0.0692**	**0.068**	**0.066**	**0.076**	**0.070**	**0.065**	**0.078**	**0.078**	**0.08**	**0.066**	**0.0731**	**0.0996**	0.2 U	**0.0985**	**0.12**	**0.14**	**0.15**	**0.16**	**0.15**	**0.18**	**0.2**	**0.23**	
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00021 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00078 B**	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**45.9**	**53.9**	**57**	**65**	**74**	**74**	**69**	**73**	**110**	**110**	
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0047 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0039 B**	**0.01**	0.01 U	
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0059 B**	**0.0062 B**	**0.0066 B**	**0.0075 B**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	0.0036 JB	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0015 B**	
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0094 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**29.7**	**32.1**	**35**	**39**	**44**	**50**	**43**	**44**	**67**	**70**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.00020 U	0.00020 U	
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0032 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	**0.0027 J**	**0.0033 J**	< 0.0200	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.011 B**	**0.026 B**	**0.070**	**0.02 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**4.43**	**4**	**3.1**	**3.5**	**3.7**	**3.2**	**2.5**	**3.8**	**3.7**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**104**	**107**	**120**	**140**	**150**	**190**	**130**	**130**	**190**	**180**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 U	0.002 UW	0.002 U	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.011 J**	**0.0087 J**	< 0.020	< 0.020	< 0.020	**0.0086 J**	< 0.0200	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.0064 B**	**0.0066 B**	**0.0071 B**	**0.0074 B**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309D																	
		Sample Date	7/21/2009	1/20/2009	7/17/2008	1/9/2008	7/12/2007	2/14/2007	7/12/2006	1/11/2006	7/21/2005	1/20/2005	7/15/2004	1/20/2004	7/16/2003	1/16/2003	7/10/2002	1/15/2002	7/12/2001	1/24/2001
		Unit	Post-ISCO								Pre-ISCO									
Field Parameters																				
Conductivity	*	mS/cm	1.088	0.952	1.254	1.118	1.145	1.187	1.143	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.78	1.36	0.27	0.47	0.41	0.26	0.24	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-173.9	35.7	-6.0	-21.0	18.5	-16.0	-8.2	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.05	5.26	5.97	6.07	5.99	6.15	6.10	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	22.34	14.82	23.69	21.92	22.20	20.96	22.57	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	--	4.2	1.17	0.81	0.00	0.73	0.63	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																				
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	12.4	11.4	15	15	16	15	18	18	16 N	17	15
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	1.08	0.985	1.1	1.1	1.1	1	1.2	1.1	1.1	1.2	1.1
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	**0.37 J**	**0.42 J**	< 5.0	< 5	< 5	**22**	**6.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	**0.69**	**0.4**	**0.8**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	**0.27**	**0.14 J**	**0.26**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	**0.022 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	**0.034 J**	**0.023 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**0.29**	**0.14 J**	**0.21**	< 10	< 10	< 10	10 U	**4.2**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.19	**0.023 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.062 B**	0.2 U	**0.041 BN**	**0.11 B**	**0.048 B**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.28**	**0.27**	**0.29**	**0.324**	**0.333**	**0.363**	**0.345**	**0.366**	**0.375**	**0.4**	**0.4**	**0.38**	**0.34**	**0.34**	**0.3**	**0.30**	**0.29**	**0.26**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**44.7**	**42.1**	**47**	**44**	**43**	**38**	**41**	**37**	**33**	**37**	**33**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.0017 B**	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	**38.7**	**35.5**	**40**	**37**	**36**	**34**	**34**	**29**	**27**	**30**	**25**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	**0.0001 J**	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	5 U	**2.89**	**3.9**	**3.5**	**3.4**	**2.6**	**3.3**	**3.3**	**3.0**	**3.2**	**3.2**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**116**	**108**	**110**	**100**	**91**	**86**	**86**	**76**	**80**	**77**	**79**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.0020 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	**0.0088 J**	**0.0089 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309SAP				
		Sample Date	1/16/2003	7/10/2002	1/16/2002	7/12/2001	1/24/2001
		Unit	Pre-ISCO				
Field Parameters							
Conductivity	*	mS/cm	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	--	--	--	--	--
pH	*	SU	--	--	--	--	--
Oxidation Reduction Potential	*	mV	--	--	--	--	--
Temperature	*	Celsius	--	--	--	--	--
Turbidity	*	NTU	--	--	--	--	--
Monitored Natural Attenuation Parameters							
Carbon Dioxide	*	µg/L	--	--	--	--	--
Iron	*	mg/L	6.0	7.2	3.6	8.5	9.7
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--
Manganese, Total	*	mg/L	1.1	1.1	1.5	1.2	1.2
Manganese, Dissolved	*	mg/L	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--
Volatile Organic Compounds							
Acetone	4,000	µg/L	**32**	< 25	< 25	**53**	< 25
Benzene	5	µg/L	**0.17 J**	< 1.0	< 1.0	< 1.0	**0.21 J**
Carbon Disulfide	4,000	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**0.38 J**
Toluene	1,000	µg/L	**0.36 J**	**0.37 J**	< 1.0	**0.65 J**	**3.2**
Trichloroethylene	5	µg/L	**0.22 J**	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, total	2,000	µg/L	< 2.0	< 2.0	< 2.0	< 2.0	**0.57 J**
Semivolatile Organic Compounds							
2-Methylnaphthalene	*	µg/L	< 10	**0.36 J**	< 13	< 10	< 10
Acenaphthene	2,000	µg/L	< 10	< 10	< 13	< 10	< 10
Acenaphthylene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Anthracene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(a)pyrene	0.2	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(b)fluoranthene	0.2	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(g,h,i)perylene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Chrysene	0.2	µg/L	< 10	< 10	< 13	< 10	< 10
Dibenzo(a,h)anthracene	0.3	µg/L	< 10	< 10	< 13	< 10	< 10
Dibenzofuran	1	µg/L	< 10	< 10	< 13	< 10	< 10
Fluoranthene	1,000	µg/L	< 10	< 10	< 13	< 10	< 10
Fluorene	1,000	µg/L	< 10	< 10	< 13	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 10	< 10	< 13	< 10	< 10
Naphthalene	20	µg/L	< 10	**5.3 J**	< 13	< 10	< 10
Phenanthrene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Pyrene	1,000	µg/L	< 10	< 10	< 13	< 10	< 10
Inorganic Compounds							
Aluminum (fume or dust)	*	mg/L	**0.15 B**	**0.032 B**	**0.03 B**	**0.11 B**	**0.54**
Antimony	0.01	mg/L	< 0.020	< 0.02	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Barium	2	mg/L	**0.20**	**0.19**	**0.23**	**0.2**	**0.2**
Beryllium	0.004	mg/L	< 0.0040	< 0.004	< 0.004	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005
Calcium metal	*	mg/L	**17**	**17**	**19**	**19**	**19**
Chromium	0.1	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	**0.0025 B**
Cobalt	*	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Copper	1.3	mg/L	< 0.020	< 0.02	< 0.02	< 0.02	**0.002 B**
Cyanide	0.2	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	--
Lead	0.015	mg/L	< 0.0050	**0.0038 B**	< 0.005	< 0.005	< 0.005
Magnesium	*	mg/L	**8.4**	**8.5**	**9.6**	**9.6**	**9.2**
Mercury	0.002	mg/L	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.00020
Nickel	0.1	mg/L	**0.020 B**	**0.021 B**	**0.035 B**	**0.031 B**	**0.031 B**
Potassium	*	mg/L	**2.0**	**2.2**	**2.2**	**2.2**	**2.2**
Selenium	0.05	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Sodium	*	mg/L	**39**	**37**	**42**	**40**	**36**
Thallium	0.002	mg/L	< 0.0020 WN	< 0.002WN	< 0.002	< 0.002W	< 0.002
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	2	mg/L	**0.0071 B**	**0.011 B**	**0.0085 B**	< 0.02	**0.0094 B**

Notes:
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Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-310SAP																													
			1/13/2015	7/16/2014	1/14/2014	7/9/2013	1/9/2013	7/24/2012	1/24/2012	7/6/2011	1/17/2011	7/15/2010	1/6/2010	7/21/2009	1/14/2009	7/22/2008	1/10/2008	7/10/2007	2/15/2007	7/11/2006	2/8/2006	1/14/2006	7/20/2005	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/15/2002	7/12/2001	1/23/2001
			Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.458	0.464	0.432	0.517	--	0.533	0.451	0.509	0.366	0.427	0.319	0.423	0.402	0.496	0.516	0.417	0.426	0.47	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.33	1.78	1.34	1.96	--	2.94	5.81	1.07	1.99	3.05	2.92	1.45	1.32	1.85	0.59	0.64	0.81	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	174.7	166.1	182.7	-12.8	--	140.0	115.4	145.6	213.4	-48.4	43.3	133.9	143.1	110.2	188.9	194.7	162.1	163.4	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.61	5.69	5.93	6.00	--	5.80	6.01	5.79	5.8	6.24	5.84	5.83	5.98	6.3	5.87	5.67	6.13	6.14	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.5	23.29	17.45	20.61	--	26.80	21.16	28.94	13.38	25.06	13.62	24.02	18.89	24.04	19.17	24.49	15.24	24.08	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.77	0.69	4.65	7.61	--	1	1.54	1.71	1.42	9.3	1.62	4	3.83	2.12	3.00	1.57	1.61	2.09	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	61.1	132	122	118	70	73	1,200 B *	940 * B	740 *	730 B	800	940 *	570	--	< 1000	< 1000	--	770	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.637	--	1.02	0.1 U	0.074	0.05 U	0.058	0.04 U	0.043 BN	0.04 B	0.15
Iron, as Ferrous (Fe+2)	*	mg/L	< 1.0	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	--	< 0.10	< 0.1	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.286	--	0.247	0.254	0.23	0.21	0.19	0.19	0.25	0.31	0.39
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.244	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	< 4	0.62	< 0.58	< 0.29	0.36 J	0.28	0.26	0.43	0.37	0.38	--	0.34	1.1	0.77	0.99	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	9.8	10	10	10.0	10 H	11 E	9.9	11	46	44	48	41	10	--	13	9.8	9.3	8	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.96 H	8.26 H	6.99 H	8.68 H	5.2	7.0	2.1	1.6	1.5	1.6	1.4	1.2	1.3	--	2.1	6.4	3.3	2.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	24	19	25	23	19	22	20	21	20	21	15	17	17	--	29	22	19	17	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**16 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	--	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**22 J**		
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.58 J**	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U		
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.35 J**	1.0 U		
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.13 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.0 J**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U		
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.044	< 0.044	< 0.047	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Naphthalene	20	µg/L	< 500	**0.53**	**0.68**	< 0.50	<0.23	< 0.19	**0.11 J**	< 0.098	< 0.10	**1.1**	< 0.20	< 0.19	< 0.19	**0.050 J**	< 10	< 10	< 10	10 U	0.0002 U	**0.25**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Phenanthrene	10	µg/L	< 0.050	**0.05**	<0.50	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.451**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.070 BN**	**0.035 B**	**0.047 BN**		
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.0055 J**	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U		
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	**0.0063 J**	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U		
Barium	2	mg/L	**0.0749**	**0.0696**	**0.0747**	**0.0823**	**0.078**	**0.081**	**0.074**	**0.074**	**0.080**	**0.065**	**0.072**	**0.065**	**0.07**	**0.074**	**0.0759**	**0.0761**	**0.0656**	**0.0699**	--	0.2 U	**0.0583**	**0.066**	**0.061**	**0.059**	**0.05**	**0.051**	**0.054**	**0.05**		
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U		
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U		
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.8**	**12.4**	**12**	**12**	**12**	**11**	**11**	**12**	**13**		
Chromium	0.1	mg/L	**0.0117**	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0014 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	**0.006**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U		
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U		
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0030 J**	< 0.0019	< 0.0019	**0.0024 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	**0.0149**	< 0.010	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0019 B**	**0.0015 B**	**0.0029 B**		
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0065 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	--		
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0024 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U		
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.03**	**7.97**	**7.5**	**7.7**	**7.6**	**6.9**	**6.6**	**7.3**	**7.5**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U		
Nickel	0.1	mg/L	**0.336**	**0.0756**	**0.0628**	**0.0621**	**0.082**	**0.066**	**0.099**	**0.11**	**0.13**	**0.15**	**0.19**	**0.22**	**0.17**	**0.16**	**0.132**	**0.214**	**0.270**	**0.356**	--	**0.211**	**0.179**	**0.091**	0.04 U	0.04 U	0.04 U	**0.029 B**	**0.038 B**	**0.083**		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.76**	**4.2**	**3.6**	**3.7**	**4**	**3.2**	**3.6**	**3.7**		
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0039 J**	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0042 B**	0.01 U		
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**65.2**	**59.7**	**68**	**68**	**83**	**80**	**89**	**94**	**86**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 U	0.002 UW	0.002 U		
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U		
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.020**	< 0.020	**0.011 J**	**0.013 J**	**0.014 J**	**0.014 J**	< 0.010	**0.026**	**0.023**	**0.010 J**	< 0.0200	**0.132**	< 0.02	0.02 U	--	0.02 U	**0.0265**	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.0073 B**	**0.0075 B**		

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-311																									
		Sample Date	1/15/2015	7/17/2014	1/9/2014	7/11/2013	1/9/2013	7/26/2012	1/18/2012	7/7/2011	1/19/2011	7/14/2010	1/6/2010	7/23/2009	1/14/2009	7/16/2008	1/8/2008	7/11/2007	2/15/2007	2/07 DUP	7/11/2006	7/21/2005	7/21/2005	7/10/2002	1/16/2002	7/18/2001	1/24/2001
		Unit	Post-ISCO																			Pre-ISCO						
Field Parameters																												
Conductivity	*	mS/cm	0.426	0.311	0.265	0.343	0.454	0.406	0.309	0.376	0.54	0.251	0.232	0.857	0.83	0.647	0.539	1.041	1.013	1.013	1.101	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.43	0.43	1.50	2.30	0.48	2.22	6.80	0.94	5.71	0.84	0.21	5.25	6.15	0.27	0.42	0.08	2.49	2.49	0.19	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-111.5	-142.3	-80.5	-104.0	-15.7	-22	-32.8	-11.7	132	18	11.1	-155.5	-27.3	-176.4	-50.1	-212.4	-65.3	-65.3	-102.9	--	--	--	--	--	--
pH	*	SU	6.24	6.42	6.54	6.36	6.29	5.89	6.73	6.45	0.475	6.09	6.99	6.79	0.751	6.27	6.52	6.79	6.92	6.92	6.59	--	--	--	--	--	--
Temperature	*	Celsius	13.9	22.24	19.58	22.64	22.84	26.49	18.61	23.51	18.5	23.5	12.54	32.34	19	23.39	21.73	23.42	16.93	16.93	26.12	--	--	--	--	--	--
Turbidity	*	NTU	8.61	23.2	9.89	115	2.47	6.23	11.0	--	11	4.48	3.55	9.66	2.1	6.43	5.56	3.6	4.93	4.93	3.14	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																												
Carbon Dioxide	*	µg/L	329	325	179	282	69	110	560 B	1,600 B	1,800	580 B	350	750	1,800	1,100	< 1000	< 1000	--	--	750	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.92	4.67	4.45	13	110	57	23
Iron, as Ferrous (Fe+2)	*	mg/L	4.15	6.29	0.761 H	9.08 H	0.67 HF	0.60 HF	0.49 HF	1.0 HF	3.6 HF	0.033 JHF	0.17 HF	< 0.10 HF	1.6 HF	0.15	1.33	2.19	5.09	5.2	5.79 H	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.07	1.21	1.14	1.5	1.8	2.0	1.7
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.886	--	--	--	--	--	--
Methane	*	µg/L	410	380	190	240	7.8	230	17	330	400	1.9	15	75	500	65	1,500	1,400	1,300	1,100	1.6	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	< 0.25	1.0	< 0.25	0.37	< 0.075	< 0.36	0.49 J	< 1.1	< 1.1	0.069	<0.50	< 0.25	< 0.25	< 0.25	< 0.25	0.25 U	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.57	--	--	--	--	--	--
Oxygen	*	mg/L	7.20 H	7.29 H	7.91 H	6.31 H	5.6	4.8	1.4	1.3	1.3	1.6	1.5	1.1	1.1	1.1	1.2	1.2	2	2.5	5.3	--	--	--	--	--	--
Sulfate	*	mg/L	< 1.0	6.1	4.5	14	18	5.1	5.4	5.6	38	35	14	73	94	45	50	84	5.7	4.3	1 U	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 25	< 5.0	**11 J**	< 100	< 100	< 200	< 100	< 50	< 50	< 50 R	< 50	50 U	310 U	180 U	250 U	500 U	2,500 U	2,500 U
Benzene	5	µg/L	**370**	**21**	**14**	< 5.0	**72**	**46**	**26**	**420**	**71**	**3.6 J**	**9.5**	**19**	**84**	**130**	**730**	**9,600**	**4,100**	**3,800**	**11,000**	**870**	**880**	**35**	**150**	**30,000 D**	**34,000 D**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 3.0	< 0.60	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5	< 5	< 5	5 U	120 U	7.1 U	10 U	20 U	100 U	100 U
Ethylbenzene	700	µg/L	**94**	< 5.0	< 5.0	< 5.0	**13**	**9.4**	**12**	**64**	**6.3**	**0.44 J**	< 5.0	< 5.0	**71**	**290**	**2,500**	**1,700**	**750**	**710**	**1,800**	**530**	**520**	**740**	**2,300**	**1,900**	**2,900**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 1.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5	< 5	< 5	5 U	62 U	36 U	50 U	100 U	500 U	500 U
Toluene	1,000	µg/L	**9.6**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.45 J**	**11 J**	**1.5 J**	< 5.0	< 5.0	< 5.0	**0.68 J**	**1.2 J**	**190**	**200**	**35**	**32**	**70**	**23**	**22**	**21**	**22**	**47 J**	**310**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.65	< 0.13	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5	< 5	< 5	5 U	120 U	7.1 U	10 U	20 U	100 U	100 U
Xylenes, total	2,000	µg/L	**41**	< 5.0	< 5.0	< 5.0	**9.2**	**7.5**	**4.8 J**	**59**	**4.9 J**	< 5.0	< 5.0	< 5.0	**10**	**9.6**	**550**	**320**	**230**	**220**	--	**96**	**96**	**54**	**69**	**210**	**420**
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**63**	**51**	**71**	**280**	**270**	**470**
Acenaphthene	2,000	µg/L	**13**	**3.2**	**7.2**	**6.9**	**4.4**	**4.2**	**35**	**14**	**15**	< 0.19	**2.0**	**7.7**	**20 J**	**0.49**	< 10	**51**	**22**	**23**	**79**	**45**	**38**	**24**	**68**	**72**	**100**
Acenaphthylene	10	µg/L	**3.2**	< 1.0	**1.2**	**1.2**	< 2.2	**0.55**	**3.1**	**3.7**	**2.9**	< 0.19	**0.33**	**1.5**	< 39	**0.82**	< 10	< 10	< 10	< 10	10 U	10 U	16 U	**3.2 J**	20 U	50 U	**25 J**
Anthracene	10	µg/L	**0.56**	**0.32**	**0.51**	**0.49**	< 2.2	< 0.22	**1.1 J**	**0.77**	**0.34**	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Benz(a)anthracene	0.1	µg/L	< 0.050	0.067	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 0.48	< 0.050	< 0.043	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	10 U	16 U	10 U	20 U	50 U	50 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10 U	16 U	**0.81 J**	**2.8 J**	**2.6 J**	**5.1 J**
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Fluorene	1,000	µg/L	**5.5**	**1.5**	**4.1**	**3.9**	< 2.2	**2.0**	**13**	**13**	**5.2**	< 0.19	**0.57**	**1.5**	**5.5 J**	< 0.19	**10**	< 10	< 10	< 10	**12**	10 U	16 U	**3.3 J**	**8.2 J**	**9.2 J**	**13 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Naphthalene	20	µg/L	**560**	**12**	**12**	**5.5**	**55**	< 0.22	**1.200 D**	**1.1**	**71**	**0.13 J**	**5.1**	**2.3**	**1,400**	**0.75**	**5,100**	**2,200**	< 10	< 10	**2,000**	**2,100**	**1,700**	**1,300 D**	**3,500 D**	**4,800 D**	**6,700 D**
Phenanthrene	10	µg/L	**3.3**	**1.1**	**3.1**	**2.7**	< 2.2	**0.82**	**10**	**5.4**	**3.5**	< 0.19	**0.26**	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	**1.1 J**	**3.8 J**	50 U	**4.1 J**
Pyrene	1,000	µg/L	< 0.050	**0.07**	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	**0.13 B**	**63**	**20**	**4.0**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0049 J**	< 0.0046	--	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	**0.0089 B**	**0.0039 J**	0.01 U
Barium	2	mg/L	**0.185**	**0.304**	**0.0281**	**0.145**	**0.048**	**0.059**	**0.060**	**0.11**	**0.21**	**0.020**	**0.031**	**0.20**	**0.26**	**0.12**	**0.343**	**0.306**	**0.288**	**0.294**	**0.314**	**0.343**	**0.323**	**0.077**	**0.34**	**0.22**	**0.17**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00026 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.004 U	0.004 U	0.004 U	**0.005**	**0.0012 J**	0.004 U
Cadmium	0.005	mg/L	< 0.005	**0.0133**	**0.0600**	**0.0240**	**0.034**	**0.023**	**0.028**	**0.017**	**0.0053**	**0.0076**	**0.043**	**0.018**	**0.0076**	**0.042**	< 0.0050	**0.0073**	**0.0051**	< 0.005	0.005 U	0.005 U	0.005 U	0.005 U	**0.0018 B**	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**38.3**	**35.9**	**44**	**48**	**57**	**53**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	**0.084**	**0.038**	**0.0042 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U	0.01 U	**0.028**	**0.0092 J**	**0.0039 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	0.0030 JB	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.02 U	0.02 U	0.02 U	**0.29**	**0.088**	**0.013 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0082 J**	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0088 J**	**0.006 J**	**0.049**	**0.054**	**0.022**	**0.012**	**0.019**	**0.0136**	0.01 U	**0.022**	**0.015**	**0.016**	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0023 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.005 U	0.005 U	**0.0017 B**	**0.044**	0.015 U	**0.0032 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**20.2**	**19**	**24**	**28**	**31**	**28**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00017 B**	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.018 J**	**0.011 J**	< 0.0023	**0.0046 J**	< 0.040	< 0.040	**0.0027 J**	**0.0025 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	**0.047**	**0.026 J**	**0.0072 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.62**	**3.37**	**4.5**	**7.3**	**6.6**	**8.8**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**188**	**175**	**140**	**130**	**170**	**170**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	0.001 U	0.001 U	0.001 U	0.002 UWN	0.002 U	**0.0017 B**	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0027 J**	**0.0038 J**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	**0.0018 J**	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	**0.36**	**0.097**	**0.013**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.024**	< 0.020	**0.016 J**	**0.012 J**	< 0.0087	**0.020**	< 0.020	< 0.020	**0.021**	**0.011 J**	< 0.0200	**0.0385**	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	**0.26**	**0.096**	**0.038**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-312																				MW-314	MW-316
			7/22/2009	1/14/2009	7/21/2008	1/8/2008	7/12/2007	2/13/2007	7/12/2006	1/10/2006	7/19/2005	1/19/2005	1/05 DUP	7/14/2004	1/21/2004	7/20/2003	1/16/2003	7/10/2002	1/18/2002	7/16/2001	1/19/2001		10/5/2006	10/4/2006
			Post-ISCO								Pre-ISCO												Post-ISCO	Post-ISCO
Field Parameters																								
Conductivity	*	mS/cm	0.474	1.19	0.548	0.692	0.411	0.365	0.221	--	--	--	--	--	--	--	--	--	--	--	--		2.28	0.513
Dissolved Oxygen (YSI)	*	mg/L	2.25	6.45	0.68	0.27	0.58	3.20	1.07	--	--	--	--	--	--	--	--	--	--	--	--		0.15	0.47
Oxidation Reduction Potential	*	mV	-52.7	-47.8	-64.6	-93.1	-33.2	-7.8	20.2	--	--	--	--	--	--	--	--	--	--	--	--		-60.6	-112.7
pH	*	SU	6.92	0.539	7.03	6.61	7.62	7.16	6.45	--	--	--	--	--	--	--	--	--	--	--	--		6.25	6.81
Temperature	*	Celsius	30.67	18.27	28.11	23.69	23.59	22.53	24.72	--	--	--	--	--	--	--	--	--	--	--	--		23.94	25.53
Turbidity	*	NTU	7.99	3.2	8.62	1.25	0.56	1.04	0.00	--	--	--	--	--	--	--	--	--	--	--	--		8.41	0.68
Monitored Natural Attenuation Parameters																								
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Iron	*	mg/L	--	--	--	--	--	--	--	0.936	0.189	0.29	0.27	0.54	0.72	0.17	2.2	2.5	6.1	10	11 N		--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	0.371	0.0564	0.097	0.11	0.11	0.31	0.04 U	0.39	0.44	0.77	0.89	1.6		--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Volatile Organic Compounds																								
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	< 50	**10**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U		50 U	50 R
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	13000
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	5 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**1.2 J**		5 U	5 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	1700
Toluene	1,000	µg/L	< 5.0	**0.32 J**	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	**2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	26
Trichloroethylene	5	µg/L	< 5.0	**0.44 J**	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.46 J**	**0.73 J**	**0.64 J**	**0.82 J**	**1.3**		5 U	5 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		5 U	860
Semivolatile Organic Compounds																								
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		--	--
Acenaphthene	2,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	43
Acenaphthylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.1 U	0.1 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.1 U	0.1 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		--	--
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Naphthalene	20	µg/L	< 0.19	**0.036 J**	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	1400
Phenanthrene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Inorganic Compounds																								
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.18 B**	0.2 U	**0.31**	**1.9**	**0.57**		--	--
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.01 U	0.006 U	0.02 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U		0.05 U	0.05 U
Barium	2	mg/L	**0.26**	**0.38**	**0.23**	**0.364**	**0.191**	**0.176**	**0.137**	0.2 U	**0.122**	**0.14**	**0.14**	**0.15**	**0.15**	**0.15**	**0.16**	**0.17**	**0.18**	**0.22**	**0.3**		**0.958**	**0.572**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U		0.01 U	0.01 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**19.8**	**20.9**	**25**	**25**	**22**	**23**	**25**	**22**	**20**	**18**	**21**	**33**		--	--
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	**0.0036 B**	0.01 U		0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0046 B**	**0.0076 B**	**0.0084 B**		--	--
Copper	1.3	mg/L	< 0.020	**0.0028 J**	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0021 B**	0.02 U	0.0034 U	**0.0079 B**	**0.0087 B**		0.01 U	0.01 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0019 B**	0.0033 U	0.005 U	0.005 U		0.01 U	0.01 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	**9.07**	**8.99**	**9**	**8.9**	**9.1**	**9.4**	**8.2**	**9.0**	**9.1**	**8.5**	**9.5**	**14**		--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U		0.0002 U	0.0002 U
Nickel	0.1	mg/L	< 0.040	< 0.040	**0.0022 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U		0.02 U	0.02 U
Potassium	*	mg/L	--	--	--	--	--	--	--	5 U	**2.73**	**4.5**	**4.6**	**2.8**	**2.7**	**4.6**	**8.9**	**3.3**	**1.8**	**2.5**	**11**		--	--
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.0058 U	0.01 U	0.01 U		0.02 U	0.02 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**13.8**	**15.1**	**15**	**14**	**15**	**14**	**15**	**15**	**14**	**13**	**14**	**25**		--	--
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 0.0010	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 UJ	0.002 U	0.002 U		0.001 U	0.001 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.0053 U	**0.023**	**0.0065 B**		0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	**0.012 J**	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.020	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.04**	**0.0074 B**	**0.0071 B**	**0.019 B**	**0.013 B**	**0.018 B**		0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
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UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-401D																																			
		Sample Date	1/14/2015	7/17/2014	1/13/2014	7/10/2013	1/9/2013	7/24/2012	1/18/2012	7/6/2011	1/19/2011	7/20/2010	1/6/2010	7/23/2009	1/13/2009	7/17/2008	1/8/2008	7/11/2007	2/13/2007	7/13/2006	1/13/2006	7/19/2005	7/05 DUP	1/18/2005	1/05 DUP	7/12/2004	7/04 DUP	1/23/2004	1/04 DUP	7/15/2003	7/03 DUP	1/16/2003	1/03 DUP	7/16/2002	1/16/2002	7/17/2001	1/24/2001
		Unit	Post-ISCO																			Pre-ISCO																
Field Parameters																																							
Conductivity	*	mS/cm	0.513	0.316	0.248	0.286	0.245	0.278	0.245	0.313	1.6	0.323	0.278	0.285	0.9	0.375	0.377	0.352	0.419	0.338	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.33	1.28	0.99	1.60	0.45	1.25	0.58	0.94	6.21	0.71	0.51	4.54	5.82	0.79	0.40	0.43	1.30	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-41.9	193.2	151.9	126.4	168.0	344.0	232.7	107.1	236.7	-7.4	-16.9	-228	281.3	116.3	290.3	247.3	230.4	218.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.17	6.04	6.03	6.13	6.13	6.15	2.89	5.71	0.313	6.06	6.16	5.94	0.348	5.92	5.97	5.94	5.91	5.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	14.7	21.69	19.99	21.11	20.41	24.68	20.42	26.64	20.07	23.18	17.02	21.98	20.11	21.33	20.57	21.90	21.22	20.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	5.05	1.16	7.97	1.11	1.70	1.33	0.79	8.67	0.36	2.1	2.08	0.71	3.1	2.87	0.91	0.71	0.34	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																							
Carbon Dioxide	*	µg/L	95.9	126	130	107	52	36	1,000 B	840 * B	620	810	800	810	600	780	< 1000	< 1000	--	850	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.053	0.056	0.078	0.054	0.079	0.051	0.27	0.04 UJ	0.050 U	0.050 U	0.049 B	12	1.2	0.4
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.065 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.228	0.141	0.354	0.334	0.13	0.14	2.7	2.8	8.9	9.1	0.55	7.6	9.7	9.8	9.4	10	2.9	6.6
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.194	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	7	8	<4	2.9	< 0.58	12	5.3	9.7	4.4	5.0	9.8	2.6	1.2	2.6	9.6	1.4	1.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.74	1.3	1.2	1.1	0.91	0.85	0.93	1.9	6.1	8.2	5.8	6.6	2.3	11	2.7	2.2	3.2	3.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	9.09 H	8.22 H	5.34 H	6.08 H	5.6	7.0	1.2	1.6	1.4	1.4	1.3	1.3	1.2	1.3	2.0	2.6	1.9	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	130	40	37	37	34	33	35	40	38	38	33	40	40	43	51	45	48	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																							
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 200	< 200	< 50	< 50	< 5.0	**7.0 J**	< 100	< 400	< 100	< 100	< 50	< 50	< 50	50 U	71 U	31 U	31 U	25 U	100 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 2.5	< 2.5	**0.55 J**	**6.1**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.0 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 6.0	< 6.0	< 0.60	< 5.0	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.02 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 1.1	**3.2 J**	< 0.11	**0.43 J**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	0.02 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	6.2 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.1 U	**1.2 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 3.3	**5.6 J**	**0.92 J**	**2.1 J**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.39 J**	1.0 U	0.02 U	1.0 U
Trichloroethylene	5	µg/L	**18**	**27**	**41**	**41**	**33**	**28**	**38 J**	**26 J**	**29**	**28**	**33**	**36**	**15**	**19**	**31**	**27**	< 5	**19**	**12**	**12**	**13**	**8.3**	**83**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	**0.3 J**	1.0 U	**0.28 J**	0.02 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 2.0	**15 J**	< 0.20	**0.73 J**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	14 U	2.5 U	2.5 U	2.0 U	8.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.12 J**	2.0 U	2.0 U	2.0 U	0.04 U	2.0 U
Semivolatile Organic Compounds																																							
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	**0.27**	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.043	< 0.043	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	**0.68 J**	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**5.1**	< 0.50	**0.69**	**0.95**	< 0.19	**0.60**	**2.9**	0.096	**0.13 J**	< 0.19	< 0.19	**0.38**	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 UJ	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																							
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.24**	**0.23**	**1.3**	0.2 UJ	**0.076 B**	**0.090 B**	**0.074 B**	**64**	**6.2 N**	**2.2**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.01 U	**0.0044 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.0847**	**0.0686**	**0.0626**	**0.0546**	**0.055**	**0.048**	**0.054**	**0.052**	**0.049**	**0.053**	**0.044**	**0.044**	**0.041**	**0.045**	**0.418**	**0.399**	**0.0424**	**0.0377**	0.2 U	**0.0342**	**0.0336**	**0.037**	**0.044**	**0.046**	**0.047**	**0.058**	**0.06**	**0.03**	**0.07**	**0.069**	**0.070**	**0.065**	**0.15**	**0.076**	**0.066**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00020 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.0040 U	0.004 U	**0.0021 B**	0.004 U	0.004 U
Cadmium	0.005	mg/L	**0.0358**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	**0.0013 J**	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.0050 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**20.1**	**20.6**	**19.9**	**19**	**20**	**33**	**34**	**39**	**40**	**60**	**43**	**44**	**44**	**44**	**41**	**44**	**39**	**41**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0012 J**	**0.0016 J**	**0.0012 J**	< 0.010	< 0.010	**0.0015 J**	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.010 U	0.01 U	**0.063**	**0.0061 B**	**0.0023 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0049 B**	**0.0047 B**	**0.0041 B**	**0.013**	**0.0083 B**	**0.0055 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0035 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	0.020 U	**0.00093 B**	**0.028**	**0.0034 B**	**0.0010 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.010 U	0.010 U	0.01 U	0.01 U	**0.028**	0.01 U	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.0050 U	0.0050 U	0.005 U	**0.0097**	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.3**	**10.2**	**9.93**	**10**	**10**	**18**	**18**	**20**	**20**	**9.4**	**23**	**24**	**25**	**23**	**25**	**22**	**24**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	**0.00017 J**	**0.00010 J**	**0.00013 J**	< 0.00020	< 0.00020	**0.00013 J**	0.00025	< 0.00020	< 0.0002	< 0.00002	0.0002 U	**0.0002**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U	0.0002 U	**0.000072 B**	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.040 U	0.040 U	0.04 U	**0.026 B**	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.13**	**4.59**	**4.52**	**5**	**5.2**	**8**	**8.1**	**7.4**	**7.6**	**10**	**11**	**8.2**	**8.3**	**7.8**	**8.5**	**7.7**	**7.8**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.010 U	**0.0054 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**42.9**	**40.3**	**39.3**	**39**	**40**	**75**	**77**	**74**	**75**	**37**	**82**	**87**	**87**	**79**	**84**	**78**	**76**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.0020 UWN	0.0020 UWN	0.002 UW	0.002 U	0.002 UN	0.002 U	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0076 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0023 J**	**0.0021 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.010 U	**0.0032 B**	**0.0034 B**	0.01 U	**0.099**	**0.013**	**0.0024 B**
Zinc	2	mg/L	**0.0387**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.011 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.05**	**0.03**	**0.0081 B**	0.020 U	0.02 U	**0.052**	**0.0094 B**	**0.013 B**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - in-situ chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected data reiected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-401S																												
		Sample Date	1/15/2015	7/17/2014	1/13/2014	7/9/2013	1/8/2013	7/24/2012	1/18/2012	7/6/2011	1/19/2011	7/20/2010	1/6/2010	1/13/2009	7/15/2008	1/8/2008	01/08 DUP	7/11/2007	2/13/2007	10/4/2006	7/13/2006	7/06 DUP	1/13/2006	7/19/2005	1/18/2005	7/12/2004	1/23/2004	7/15/2003	1/16/2003	7/16/2002	4/5/2002	1/18/2002	7/17/2001	1/24/2001
		Unit	Post-ISCO																					Pre-ISCO									
Field Parameters																																	
Conductivity	*	mS/cm	0.487	0.504	0.453	0.401	0.250	0.273	0.215	0.256	1.300	0.349	0.285	2.440	0.416	0.358	0.358	0.398	0.468	0.446	0.415	0.415	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.37	1.55	3.54	0.77	0.84	0.84	0.59	0.88	6.33	1.48	5.09	5.83	3.41	1.79	1.79	6.44	5.98	7.91	7.09	7.09	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	51.6	208.2	171.1	227.7	129.0	190.0	168.7	105.8	153.3	13.3	-4.4	314.5	173.1	254.9	254.9	249.5	291	182.8	5.95	5.95	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.38	5.78	5.99	5.90	6.18	6.25	3.88	5.82	0.243	6.49	6.08	0.374	5.92	6.08	6.08	5.98	5.89	6.07	244.3	244.3	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	13.5	20.91	18.75	20.89	18.64	25.59	19.48	25.58	18.99	22.99	18.26	20.24	21.98	20.52	20.52	21.28	20.44	21.51	20.22	20.22	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	7.47	4.29	3.43	2.76	1.3	1.63	2.73	5.49	8.38	2	7.79	1.1	0.82	1.57	1.57	0.59	0.36	0.49	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																	
Carbon Dioxide	*	mg/L	168	185	164	142	61	56	960 B	740 * B	600	1,100 B	860	640	960	< 1000	< 1000	< 1000	--	--	1,000	900	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.081	0.12	8.9	0.04 U	0.041 B	0.053	--	0.078	1.1	0.15
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	< 0.100	< 0.10 HF	< 0.10 HF	0.035 J HF	< 0.025 HF	< 0.064 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.10	< 0.1	--	0.1 U	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0094	0.0119	0.0306	0.0547	0.14	1.9	0.56	2.3	1.0	1.5	--	1.9	2.3	1.8
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 UJ	0.005 UJ	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	< 4	< 0.58	11	3.0	11	29	8.2	44	0.27	0.075 J	0.99	0.66	34	1.4	--	0.59	0.4	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	2.5	3.1	4.2	1.1	0.57	< 0.25	< 0.075	< 0.075	< 0.36	1.4	1.8	1.6	5.5	0.99	0.99	0.52	0.69	--	1.3	1.3	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	14	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.46 H	8.21 H	5.70 H	7.44 H	7.4	6.4	1.3	1.6	1.5	1.3	1.4	1.1	1.5	3.9	3.4	6.4	7.4	--	9.6	8.4	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	62	67	75	64	31	28	26	25	25	50	46	48	53	53	53	57	74	--	71	71	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																	
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 25	< 25	< 5.0	**9.4 J**	< 100	< 100	< 100	< 50	< 50	< 50	< 50	--	50 R	50 R	100 U	83 U	25 U	25 U	25 U	25 U	25 U	**24 J**	--	**12 J**	0.12 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 1.3	< 0.25	13	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	10 U	3.3 U	10 U	10 U	**6.9**	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 3.0	< 3.0	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	--	5 U	5 U	10 U	3.3 U	10 U	10 U	10 U	10 U	10 U	10 U	--	10 U	5.0 U	10 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	0.55	< 0.55	< 0.11	**0.58 J**	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	10 U	3.3 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	--	5 U	5 U	10 U	17 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	**1.3 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.7	< 1.7	**0.90 J**	**3.4 J**	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	10 U	3.3 U	10 U	10 U	**2.9**	10 U	10 U	**0.28 J**	10 U	10 U	5.0 U	10 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	**5.3**	**21**	**59**	**40**	**38**	**28**	**49**	**100**	**170**	**58**	**40**	**100**	**100**	**200**	**130**	--	**56**	**52**	**19**	**31**	**4.1**	**7.8**	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 0.20	**0.95 J**	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	20 U	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	--	2.0 U	10 U	2.0 U
Semivolatile Organic Compounds																																	
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 5.0	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.10	<0.10	<0.10	< 0.1	--	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	**0.23**	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.043	< 0.045	< 0.043	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.10	<0.10	<0.10	< 0.1	--	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**0.72 J**	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	**0.16 J**	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	**1.2**	< 0.50	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	**0.71**	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.5	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	**0.064**	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																	
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	**0.24**	**17**	0.2 U	**0.10 B**	**0.043 B**	--	**0.036 B**	**1.7 N**	**0.21**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.010	< 0.010	< 0.010	< 0.010	<0.0500	<0.0500	<0.050	< 0.05	--	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.112**	**0.121**	**0.100**	**0.0941**	**0.06**	**0.064**	**0.067**	**0.061**	**0.057**	**0.051**	**0.043**	**0.05**	**0.059**	**0.0482**	**0.0479**	**0.0439**	**0.0481**	--	**0.0621**	**0.0574**	0.2 U	**0.0337**	**0.044**	**0.049**	**0.082**	**0.06**	**0.065**	**0.067**	--	**0.068**	**0.067**	**0.061**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	--	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.0050 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**14.7**	**13.9**	**12**	**16**	**29**	**27**	**32**	**31**	--	**32**	**30**	**28**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0014 J**	**0.0016 J**	**0.0013 J**	**0.0022 J**	<0.010	**0.0022 J**	**0.0024 J**	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	**0.016**	0.01 UJ	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0053 B**	**0.0063 B**	--	**0.0078 B**	**0.011**	**0.0066 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0030 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	--	**0.001 B**	0.02 U	**0.096**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	**0.0075**	0.005 UJ	0.0050 U	0.005 U	--	0.005 U	0.005 U	**0.0026 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**12.7**	**10.5**	**7.7**	**10**	**24**	**21**	**24**	**23**	--	**25**	**23**	**23**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00011 B**	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.06**	**3.1**	**4.1**	**3.9**	**6.1**	**4.4**	**4.5**	--	**4.7**	**4.2**	**3.2**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**52.1**	**43.9**	**36**	**56**	**67**	**62**	**76**	**75**	--	**78**	**76**	**76**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1	--	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UW	0.002 UW	--	0.002 UW	0.002 UN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	**0.034**	0.01 UJ	0.010 U	0.01 U	--	0.01 U	**0.0044 B**	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.028**	**0.03**	0.020 U	0.02 U	--	0.02 U	**0.0092 B**	**0.062**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

B = Analyte was found in the blank and sample
D = Surrogate or matrix spike recoveries were not obtained due to dilution of extract
F = MS or MSD exceeds the control limits
H = Sample was prepped or analyzed beyond specified holding time
* = LCS or LCSD exeeds the control limits

JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Soike samole recoverv outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-401SAP																													
			1/29/2015	1/15 DUP	7/16/2014	1/13/2014	7/10/2013	1/9/2013	7/24/2012	1/18/2012	7/6/2011	1/17/2011	7/20/2010	1/6/2010	7/23/2009	1/13/2009	7/17/2008	1/8/2008	7/11/2007	2/13/2007	7/13/2006	1/13/2006	7/19/2005	1/18/2005	7/12/2004	1/23/2004	7/15/2003	1/17/2003	7/16/2002	1/18/2002	7/17/2001	1/24/2001
			Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.286	0.286	0.324	0.314	0.327	0.335	0.359	0.348	0.305	2.55	0.364	0.315	0.336	1.07	0.539	0.485	0.39	0.355	0.351	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.97	1.97	2.56	0.41	0.44	0.41	1.37	0.78	3.22	5.98	6.04	12.6	7.58	198	1.39	0.49	2.31	0.47	2.3	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	98.6	98.6	182.5	164.4	186.6	180.0	345	230.8	155.4	206.1	155.5	63.4	167	5.73	170	329.4	238.7	258	96.7	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.94	5.94	5.94	5.95	5.96	6.06	6.06	2.99	5.40	0.256	6.24	8.07	6.01	0.318	6.04	5.92	5.88	5.9	6.00	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.92	17.92	23.21	20.47	22.56	20.86	24.98	19.05	26.87	15.7	31.64	16.15	25.11	20.14	25.12	21.35	23.06	20.39	21.4	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.19	0.84	1.19	1.52	0.58	1.00	1.90	0.78	7.37	9.02	26.0	9.50	2.7	0.85	9.9	2.14	3.24	0.46	1.41	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	65.5	60.4	138	143	124	69	75	1000 B	910 * B	850 *	670 B	550	940	720	970	< 1000	< 1000	--	720	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.104	0.1 U	0.05 U	2.6	0.33	0.28	2.5	0.19	0.43	0.66	3.6
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	< 0.100	<0.100	< 0.100	< 0.10 HF	< 0.10 HF	0.025 J HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0177	0.0857	0.131	0.36	0.17	0.15	0.04	0.25	0.06	0.21	0.13	0.47
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	< 4	<4	< 4	0.63	< 0.58	< 0.29	< 0.29	< 0.19	< 0.19	0.29	0.20	0.43	0.10 J	0.13	2.0	0.32	1.2	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	2.6	2.4	2.6	2.9	2.4	3.0	2.8	3.8	2.4	12	12	14	11	3.1	25	5.2	3.5	5.3	3	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	8.44 H	8.45 H	8.01 H	5.22 H	5.91 H	6.2	5.7	1.3	1.6	1.5	1.6	1.5	1.1	1.2	1.2	2.4	2.9	2.3	4.2	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	43	41	39	45	41	38	38	44	33	34	33	33	39	42	57	57	45	55	44	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	67 U	62 U	25 U	25 U	25 U	25 U	25 U	**18 J**	**700 D**	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.96 J**	1.0 U	1.0 U	1.0 U	**5.1**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.7 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	12 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.38 J**	1.0 U	1.0 U	**0.7 J**
Trichloroethylene	5	µg/L	**19**	**20**	**23**	**25**	**27**	**18**	**14**	**8.7**	**1.4 J**	**1.6 J**	**1.3 J**	< 5.0	< 5.0	**1.1 J**	**2.6 J**	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	13 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.16 J**
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 5.0	< 5.0	< 0.50	< 0.50	< 0.50	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	0.14 J	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(e,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.045	< 0.043	< 0.049	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 500	**0.6**	< 0.50	< 0.50	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	**0.033 J**	**0.19**	< 10	< 10	< 10	10 U	0.2 U	**0.54**	**0.37**	0.2 U	**0.54**	10 U	**3.4 J**	10 U	10 U	10 U	**19**
Phenanthrene	10	µg/L	< 0.50	< 0.50	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	**0.38 J**
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	**2.3**	**0.3**	**0.5**	**3.3**	**0.27**	0.63 U	**1.2 N**	**6.4**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0032 B**	**0.0032 B**
Barium	2	mg/L	**0.0576**	**0.0566**	**0.0522**	**0.052**	**0.0498**	**0.061**	**0.063**	**0.075**	**0.083**	**0.10**	**0.086**	**0.082**	**0.075**	**0.077**	**0.064**	**0.0790**	**0.0653**	**0.0770**	**0.0705**	0.2 U	**0.0614**	**0.062**	**0.069**	**0.049**	**0.04**	**0.065**	**0.053**	**0.077**	**0.078**	**0.074**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**16**	**18.2**	**17**	**23**	**15**	**15**	**15**	**12**	**14**	**14**	**12**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0015 J**	< 0.010	< 0.010	< 0.010	**0.0015 J**	**0.0021 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0042 B**	0.01 U	0.01 U	0.01 U	**0.0047 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.0035 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0025 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0057 B**	0.02 U	**0.0019 B**	0.02 U	**0.0026 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	0.012	< 0.010	< 0.010	< 0.010	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Maonesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**7.43**	**7.67**	**7**	**7**	**6**	**6.7**	**7.1**	**5.7**	**6.6**	**6.4**	**6.2**
Mercury	0.002	mg/L	0.00036	0.00036	**0.00037**	**0.00036**	**0.00062**	**0.00025**	**0.00021**	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	**0.0005**	**0.00085 F4**	0.0002 U	0.0002 U	0.0002 U	**0.000098 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	**0.0046 J**	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.8**	**3.1**	**3.5**	**2.6**	**3.4**	**2.8**	**2.5**	**2.6**	**2.7**	**2.7**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0054 B**	0.01 U	0.01 U	**0.0045 B**
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**74.9**	**92**	**100**	**88**	**120**	**100**	**120**	**110**	**120**	**140**	**180**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UJ	0.002 UN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0066 B**	0.01 U	0.01 U	0.01 U	**0.0085 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0231**	< 0.020	< 0.020	**0.0094 J**	**0.011 J**	**0.010 J**	**0.012 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.029**	0.02 U	**0.0092 B**	**0.0068 B**	**0.021**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date	MW-402S																												
		Unit	1/12/2015	7/15/2014	1/7/2014	7/9/2013	1/8/2013	1/17/2012	1/17/2012	7/6/2011	1/18/2011	7/15/2010	1/6/2010	1/14/2009	7/21/2008	1/9/2008	7/10/2007	2/15/2007	7/11/2006	1/16/2006	7/20/2005	2/7/2005	7/15/2004	1/22/2004	7/16/2003	1/20/2003	7/11/2002	1/15/2002	7/17/2001	1/23/2001
			Post-ISCO																		Pre-ISCO										
Field Parameters																															
Conductivity	*	mS/cm	0.586	0.579	0.463	0.417	0.557	0.702	0.551	0.487	5.17	1.492	0.372	0.329	0.399	0.457	0.387	0.486	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.46	1.19	2.02	2.61	2.39	3.79	8.00	4.23	6.26	5.75	6.16	2.28	1.64	0.69	0.86	0.45	0.65	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	210.1	120.3	193.8	8.9	80.8	111.0	16.9	110.0	189.4	-71.1	117.9	282.5	165.2	192.9	139.4	153.9	237.6	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.90	6.13	6.24	6.11	6.18	6.16	6.88	5.70	0.509	6.41	5.92	6.25	5.75	5.93	5.97	6.35	6.36	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.7	22.66	15.57	22.18	18.53	26.40	24.03	22.40	19.18	22.23	17.87	18.35	22.06	20.82	22.29	18.00	20.61	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.70	1.64	1.56	2.81	1.07	1.5	4.54	9.9	8.00	7.5	8.7	3.09	6.75	0.63	4.88	6.53	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters														--																	
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.123	0.1 U	0.05 U	0.08	0.05 U	0.06	120	0.23	130 N	190	0.11
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9	0.071	0.57	1.1	1.4	1.2	4.2	1.2	4.4	5.2	1.9
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**9.5 J**	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	**0.28 J**	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	**0.18 JB**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5 J**	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.28 J**	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.48 J**	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.33 J**	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																															
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**860 D**
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**100**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**13**	
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.048	< 0.057	< 0.049	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**24**	
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**5.9 J**
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**43**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	**0.33**	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.21	< 0.19	**0.56**	< 0.13	**0.27**	< 0.20	< 0.19	< 0.19	0.060 J	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**0.54 J**	**12,000 D**
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**42**	
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**7.0 J**	
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	200 U	200 U	200 U	200 U	200 U	200 U	**270,000**	**540**	**250,000 N**	**410,000 N**	**230 N**	
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.020	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	**0.22**	< 0.010	< 0.010	<0.0500	<0.050	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.011**	0.01 U	**0.0050 B**	**0.021**	0.01 U
Barium	2	mg/L	**0.0777**	**0.0864**	**0.0802**	**0.0447**	**0.066**	**0.047**	**0.078**	**0.086**	**0.072**	**0.061**	**0.58**	**0.048**	**0.059**	**0.0505**	**0.0511**	**0.0602**	**0.051**	0.2 U	**0.0423**	**0.049**	**0.055**	**0.053**	**0.05**	**0.64**	**0.049**	**0.68**	**0.92**	**0.061**	
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	**0.00029 J**	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.01**	0.004 U	**0.011**	**0.016**	0.004 U	
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0027 B**	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**25**	**28.8**	**28**	**36**	**36**	**31**	**38**	**32**	**37**	**39**	**43**	
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0089 J**	**0.0024 J**	**0.0016 J**	< 0.010	< 0.010	**0.0014 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.19**	0.01 U	**0.2**	**0.31**	0.01 U	
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.09**	**0.0026 B**	**0.096**	**0.14**	**0.0065 B**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0036 J**	< 0.0019	< 0.020	< 0.020	< 0.020	**0.0023 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.12**	**0.0012 B**	**0.12**	**0.18**	**0.0023 B**	
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0052 J**	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	**0.0049 J**	< 0.0040	<0.010	<0.010	**0.0025 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.071**	0.005 U	**0.073**	**0.1**	**0.0018 B**	
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**14.6**	**16**	**16**	**20**	**20**	**18**	**29**	**19**	**30**	**37**	**26**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00074 S**	0.0002 U	**0.00070**	**0.00093**	0.00020 U	
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0043 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0020 J**	< 0.0200	< 0.020	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.094**	0.04 U	**0.092**	**0.14**	0.04 U	
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.76**	**5.18**	**6.1**	**7.6**	**9**	**6.9**	**16**	**7.3**	**16**	**21**	**7.0**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.020	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**42.7**	**46.8**	**42**	**42**	**21**	**39**	**36**	**37**	**36**	**38**	**49**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	**0.00030 J**	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	**0.0013 B**	0.002 UN	0.002 U	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	**0.014**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.38**	0.01 U	**0.41**	**0.6**	0.01 U	
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.017 J**	< 0.0087	<0.020	< 0.020	**0.017 J**	< 0.020	< 0.0200	< 0.020	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.35**	0.02 U	**0.34**	**0.51**	0.02 U	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected: data reiected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-402D																												
			1/13/2015	7/15/2014	1/7/2014	7/9/2013	1/9/2013	7/24/2012	1/17/2012	7/6/2011	1/17/2011	7/15/2010	1/5/2010	7/22/2009	1/13/2009	7/22/2008	1/9/2008	7/11/2007	2/15/2007	7/13/2006	1/15/2006	7/20/2005	2/7/2005	7/15/2004	1/22/2004	7/16/2003	1/20/2003	7/12/2002	1/15/2002	7/17/2001	7/01 DUP	1/24/2001
			Post-ISCO																			Pre-ISCO									
Field Parameters																															
Conductivity	*	mS/cm	0.615	0.671	0.516	0.660	0.727	0.657	0.759	0.702	2.6	0.583	0.515	0.531	0.487	0.62	0.690	0.644	0.668	0.608	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.44	1.5	3.57	0.44	0.59	4.06	7.92	2.20	6.48	2.12	4.66	0.23	0.66	0.31	0.31	0.19	0.58	0.37	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	193.1	135.6	82.5	-27.1	67.7	107.0	29.3	101.4	129.3	-74.6	159.9	181.9	165.5	119.5	180.8	120.1	147.8	78.5	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.00	6.17	6.43	6.18	6.23	6.13	6.80	5.79	0.552	6.19	6.47	6.11	6.24	6.34	6.05	6.16	6.49	6.18	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.2	21.17	14.74	23.48	17.67	25.80	21.07	21.58	17.61	21.84	15.92	21.31	18.89	22.82	20.77	22.97	19.07	22.21	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	6.44	2.34	2.06	0.89	0.78	2.00	3.34	6.87	9.50	6.80	0.82	4.3	4.13	5.74	0.49	1.42	1.57	2.10	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																															
Carbon Dioxide	*	µg/L	144	140	266	156	72	51	850 B	930 * B	770 *	780	730	910 *	760	860	< 1000	< 1000	--	860	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	4.49	2.29	54	0.31	0.35	0.9	0.49	2.9	3.8 N	0.21	0.19	4.3
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.8	2.67	1.89	4.3	2.9	2.4	2.5	2.5	2.5	2.6	2.4	2.4	2.4
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.64	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	<4	< 0.58	2.4	< 0.29	< 0.29	< 0.19	< 0.19	0.22	0.23	0.5	0.26	0.49	1.8	2.3	2.7	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L		1.5	1.7	2.2	3.6	3.6	4.9	4.6	14	13	9.4	6.0	1.9	8.9	2.3	2.0	2.2	2.5	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	1.6	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.79 H	7.78 H	7.28 H	8.18 H	6.4	7.5	--	1.5	1.6	1.4	1.4	1.1	1.3	1.1	1.9	1.6	2.3	1.9	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	56	54	78	63	35	33	39	39	36	39	26	33	32	29	44	40	45	44	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	uo/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.19 J**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.4 J**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.29 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.16 J**	**0.23 J**	**0.15 J**	**0.19 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	**2.2**	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																															
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.37 J**	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.046	< 0.045	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	ua/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	ua/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	< 0.50	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	**0.30**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	**0.24**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.91**	**5.48**	**130**	**0.68**	**0.35**	**1.3**	**0.83**	**6.7**	**8.8 N**	**0.52 N**	**0.44 N**	**12**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0768**	**0.0771**	**0.0874**	**0.0950**	**0.10**	**0.083**	**0.12**	**0.10**	**0.10**	**0.24**	**0.082**	**0.078**	**0.08**	**0.083**	**0.0699**	**0.0662**	**0.0529**	**0.0615**	0.2 U	**0.0472**	**0.22**	**0.053**	**0.045**	**0.04**	**0.045**	**0.052**	**0.058**	**0.039**	**0.037**	**0.055**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	**0.0065**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	**0.00067 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**26.5**	**28**	**40**	**55**	**47**	**43**	**54**	**50**	**50**	**49**	**49**	**47**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0012 J**	< 0.0012	**0.0018 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0079**	0.01 U	**0.097**	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0049 B**	**0.0061 B**	0.01 U	0.01 U	**0.0086 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	**0.046**	0.01 U	0.01 U	0.01 U	**0.0017 B**	**0.0075 B**	**0.0057 B**	**0.0019 B**	**0.0015 B**	**0.0058 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	**0.076**	0.02 U	0.02 U	0.02 U	**0.0037 B**	**0.0051 B**	**0.0054 B**	0.02 U	0.02 U	**0.011 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0033**	0.005 U	**0.029**	0.005 U	0.005 U	0.005 U	**0.0024 B**	0.005 U	0.0050 U	0.005 U	0.005 U	**0.0019 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.9**	**11.2**	**18**	**21**	**18**	**18**	**22**	**21**	**21**	**21**	**21**	**21**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	**0.00042**	< 0.00020	< 0.00020	< 0.00020	< 0.00091	< 0.00091	< 0.00091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	**0.00022**	0.0002 U	0.0002 U	0.0002 U	**0.00015 B**	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	**< 0.040**	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	**0.06**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0063 B**	0.04 U	0.04 U	**0.007 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**13.7**	**14.6**	**22**	**19**	**19**	**22**	**19**	**18**	**18**	**17**	**17**	**18**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0043 B**	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**72.8**	**69.7**	**76**	**73**	**40**	**77**	**79**	**72**	**77**	**78**	**77**	**88**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	**0.0023**	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.0020 U	0.002 UWN	0.002 UWN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0166**	0.01 U	**0.22**	0.01 U	0.01 U	0.01 U	**0.0026 B**	**0.011**	**0.015**	0.01 U	0.01 U	**0.019**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	**0.015 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	**0.0203**	0.02 U	**0.14**	0.02 U	0.02 U	**0.03**	**0.008 B**	**0.016 B**	**0.0098 B**	0.02 U	0.02 U	**0.026**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-404DR																												
			1/14/2015	7/17/2014	1/13/2014	7/10/2013	1/9/2013	7/26/2012	1/19/2012	7/7/2011	1/19/2011	7/19/2010	1/5/2010	7/23/2009	1/14/2009	7/15/2008	1/8/2008	7/10/2007	2/14/2007	7/12/2006	7/21/2005	1/20/2005	7/16/2004	1/24/2004	7/19/2003	1/17/2003	7/15/2002	4/4/2002	4/3/2002	1/16/2002	7/16/2001	1/23/2001	01/01 DUP
			Post-ISCO																		Pre-ISCO										
Field Parameters																																
Conductivity	*	mS/cm	0.450	0.288	0.740	0.800	0.732	0.841	0.680	0.786	2.95	0.779	0.696	0.739	1.91	0.67	0.664	0.571	0.397	0.205	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	3.19	0.71	0.52	0.31	0.83	0.48	1.13	3.38	6.29	1.3	5.56	0.25	6.24	0.87	1.41	0.36	5.43	4.89	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-41.7	-14.6	291.8	112.9	23.5	89.0	232.6	112.2	510.2	3.2	304	437.2	478.3	124.1	528.9	273.4	14.7	-82	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.06	6.18	6.32	6.03	6.36	6.11	6.19	6.38	0.814	6.32	5.94	5.81	0.664	5.94	5.91	5.88	6.32	6.98	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.3	22.25	19.60	22.27	20.71	30.00	17.35	23.78	19.81	25.7	11.17	22.72	18.02	22.65	19.39	23.39	18.13	22.89	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.84	0.71	0.73	3.66	1.11	0.5	1.43	1.09	0.59	4.2	1.01	4.8	3.45	1.36	4.10	3.98	9.97	48.4	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	253	410	443	467	170	220	3,200 B	2,600 B	2,400	780 JB	1,400	2,500	1,200	4,200	< 1,000	< 1,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.72	2.5	1.2	0.05 U	0.11	0.17	6.7 N	--	--	0.14	0.27	1.2	0.61
Iron, as Ferrous (Fe+2)	*	mg/L	< 1.00	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.076 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.416	0.3	0.15	0.11	0.16	0.16	0.24	--	--	0.21	0.18	0.22	0.21
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	11	0.95	5.5	0.52 J	8.1	2.1	< 0.19	1.3	3.2	1.4	0.59	2.3	2.6	6.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	13	< 1.1	< 1.1	0.22	< 0.50	< 0.25	< 0.25	< 0.25	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	8.96 H	7.79 H	7.10 H	6.22 H	5.2	5.8	--	1.3	1.4	1.4	1.4	1.0	1.1	0.77	3.2	3.3	5.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	78	140	140	140	120	120	120	140	130	39	120	120	120	100	120	72	68	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	**47**	25 U	25 U	25 U	25 U	25 U	25 U	--	--	25 U	25 U	25 U	25 U
Benzene	5	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.8**	1.0 U	**0.18 J**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.17 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.37 J**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.44 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.89 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	--	--	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	--	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	**16**	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.082**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	**0.074**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	0.2 U	**0.6**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	**0.065**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	**0.68**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	--	0.2 U	0.2 U	**0.66**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.58**	0.2 U	10 U	10 U	10 U	**0.7 J**	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	**0.065**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.5**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	**0.067**	< 0.050	< 0.050	<0.21	< 0.19	< 0.049	< 0.045	< 0.048	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	**0.62**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	--	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.94**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	**1.6 J**	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	**0.064**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	**0.56**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**3.3**	< 0.50	**0.55**	**1.1**	<0.21	< 0.19	< 0.11	< 0.10	**0.17 J**	**0.75**	< 0.19	< 0.19	< 0.19	**0.33**	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.26**	0.2 U	10 U	10 U	10 U	10 U	**24**	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	**0.083**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.36**	0.2 U	10 U	10 U	10 U	10 U	**0.99 J**	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	**0.084**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**1.2**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.44**	**4.1**	**1.8**	0.2 U	**0.3**	**0.15 B**	**15**	--	--	**0.15 B**	**0.32**	**2.3 N**	**1.0 N**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	--	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0678**	**0.141**	**0.140**	**0.174**	**0.15**	**0.19**	**0.16**	**0.20**	**0.19**	**0.24**	**0.23**	**0.26**	**0.28**	**0.31**	**0.331**	**0.306**	**0.178**	--	**0.31**	**0.15**	**0.078**	**0.058**	**0.06**	**0.059**	**0.23**	--	--	**0.048**	**0.042**	**0.088**	**0.069**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.00030 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00061 B**	--	--	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	**0.00082 B**	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.66**	**9.1**	**8.2**	**8.6**	**7.8**	**8.1**	**8.9**	--	--	**8.3**	**7.9**	**9.6**	**9.2**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	--	--	0.01 U	0.01 U	**0.0021 B**	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0027 B**	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0030 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0045 B**	**0.017 B**	--	--	0.02 U	**0.0011 B**	**0.0041 B**	**0.0035 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	**0.012**	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	**0.011**	< 0.010	< 0.010	**0.0099 J**	< 0.010	< 0.010	< 0.010	--	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	--	0.005 U	**0.021**	**0.018**	0.005 U	0.005 U	0.005 U	**0.009**	--	--	0.005 U	0.005 U	**0.0016 B**	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.47**	**6.8**	**5.9**	**6**	**6.5**	**6**	**7**	--	--	**6.1**	**5.6**	**6.9**	**6.6**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	--	--	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0040 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	**0.0017 J**	< 0.0200	< 0.02	< 0.02	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0083 B**	--	--	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.51**	**2.6**	**2.3**	**2.1**	**2**	**2.2**	**2.8**	--	--	**2.1**	**2.0**	**2.2**	**2.1**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0056 B**	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.8**	**20**	**17**	**17**	**18**	**18**	**17**	--	--	**18**	**17**	**20**	**19**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	--	0.001 U	0.002 U	0.002 U	0.001 U	0.002 U	0.002 U	0.002 UWN	--	--	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0029 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0039 J**	**0.0039 J**	< 0.0100	< 0.010	< 0.010	--	0.01 U	**0.021**	0.01 U	0.01 U	0.01 U	0.01 U	**0.0026 B**	**0.053**	--	--	**0.0025 B**	0.01 U	**0.0045 B**	**0.0029 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	**0.0233**	0.020	0.020	< 0.0087	**0.011 J**	< 0.0087	**0.015 J**	<0.020	**0.057**	**0.036**	**0.014 J**	**0.0228**	< 0.02	< 0.02	--	**0.0232**	**0.056**	**0.05**	**0.039**	**0.06**	**0.033**	**0.035**	--	--	**0.041**	**0.012 B**	**0.013 B**	**0.011 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-408S																												
			1/15/2015	7/16/2014	1/9/2014	7/10/2013	1/8/2013	7/25/2012	1/18/2012	7/5/2011	1/20/2011	7/14/2010	1/12/2010	01/09 DUP	1/21/2009	7/16/2008	1/8/2008	7/10/2007	7/13/2006	7/06 DUP	1/15/2006	01/06 DUP	7/20/2005	2/7/2005	7/13/2004	1/24/2004	7/19/2003	1/16/2003	7/11/2002
			Post-ISCO																				Pre-ISCO							
Field Parameters																															
Conductivity	*	mS/cm	1.6	1.541	1.241	1.299	1.059	0.797	0.662	1.509	1.51	1.492	1.676	1.214	0.3	1.235	1.210	0.991	1.112	1.112	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.71	0.12	0.23	1.14	0.51	0.51	0.43	0.19	6.67	5.75	0.73	0.3	6.51	0.49	0.30	1.18	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-153.6	-119.4	-121.7	9.5	-97.5	-76.9	-40.0	-106.9	-105.1	-106.4	-83.7	-106	-106	-125.7	-103.4	-95.3	-104.4	-104.4	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	7.36	6.46	6.92	6.83	6.62	6.64	6.19	6.32	1.321	6.41	7.48	6.51	1.214	6.44	6.49	6.60	6.58	6.58	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	11.8	22.64	18.55	24.01	17.52	26.40	19.97	23.54	18.65	23.94	20.21	18.13	18.13	23.87	20.65	22.57	23.37	23.37	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	22.1	9.92	3.72	1.11	1.72	2.84	8.8	9.62	14.0	102.8	1.28	3	3	6.24	1.80	7.28	4.33	4.33	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																															
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19.8	19.6	18.3	98	22	32	19	35	28
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.711	0.606	0.638	1.6	0.62	0.66	0.52	0.70	0.72
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	**5.9 J**	< 5.0	**14 J**	< 100	< 100	< 100	< 100	< 50	< 50	50 R	50 R	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.13 J**	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.45 J**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.4 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.90 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3.6 J**	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semivolatile Organic Compounds																															
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	**65**	< 0.10	< 0.096	< 0.19	< 0.19	**0.089 J**	**0.086 J**	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	**0.031 J**	**0.031 J**	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.051**	< 0.050	< 0.050	< 0.19	< 0.19	**0.90**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	**0.050**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	**0.055**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.10	<0.10	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	**0.057**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.048	< 0.046	< 0.043	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.10	<0.10	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	**0.26**	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	**0.30**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	**0.40**	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	**3.3**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	**0.059**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	**44**	< 0.50	< 0.50	< 0.19	**3.6**	**0.59**	< 0.10	**0.12 J**	< 0.19	**0.35**	**1.4**	**1.3**	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	<0.050	**0.088**	< 0.050	< 0.050	< 0.19	< 0.19	**5.8**	< 0.10	< 0.096 *	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	**0.096**	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	**0.23**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.29**	**2.2**	**1.1**	**120**	**3.8**	**12**	**0.7**	**12**	**0.032 B**		
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	0.02 U	0.02 U	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U		
Arsenic	0.05	mg/L	**0.222**	**0.143**	**0.210**	< 0.0500	**0.39**	**0.21**	< 0.0046	**0.031**	**0.018 J**	**0.017 JB**	**0.22**	**0.043**	**0.043**	**0.041**	**0.0509**	**0.0439**	**0.126**	**0.123**	**0.0697**	**0.0723**	**0.142**	**0.069**	**0.056**	**0.058**	**0.02**	**0.079**	**0.044**		
Barium	2	mg/L	**0.444**	**0.451**	**0.289**	**0.201**	**0.38**	**0.45**	**0.54**	**0.62**	**0.60**	**0.55**	**0.58**	**0.45**	**0.44**	**0.35**	**0.341**	**0.302**	**0.447**	**0.438**	**0.467**	**0.453**	**0.397**	**1.7**	**0.56**	**0.58**	**0.44**	**0.72**	**0.58**		
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00030 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	0.01 U	0.01 U	0.005 U	0.005 U	0.004 U	**0.0054**	0.004 U	0.004 U	0.004 U	**0.00073 B**	0.004 U		
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U		
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**71.7**	**75.6**	**89.2**	**89**	**79**	**80**	**78**	**88**	**79**		
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0015 J**	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	0.01 U	0.01 U	0.005 U	0.005 U	0.01 U	**0.14**	0.01 U	**0.013**	0.01 U	**0.013**	0.01 U		
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.007 U	0.01 U	**0.035**	0.01 U	0.01 U	0.01 U	**0.0032 B**	0.01 U		
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0028 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	**0.11**	0.02 U	0.02 U	0.02 U	**0.014 B**	**0.0011 B**		
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.013**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.010	< 0.010	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U		
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	0.01 U	0.01 U	**0.0041**	**0.0057**	0.005 U	**0.23**	**0.0063**	**0.034**	0.005 U	**0.032**	0.005 U		
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**71.9**	**78**	**77.5**	**89**	**82**	**83**	**79**	**97**	**91**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.0013**	0.0002 U	0.0002 U	0.0002 U	**0.00016 B**	0.0002 U		
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0025 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.020	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	**0.051**	0.04 U	0.04 U	0.04 U	**0.0058 B**	0.04 U		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**22.8**	**23.3**	**20.5**	**27**	**25**	**26**	**29**	**28**	**27**		
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.020	0.02 U	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.010 U	0.01 U		
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**69.5**	**70.5**	**59.1**	**60**	**86**	**86**	**70**	**100**	**100**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.004 UN		
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	**0.0075**	**0.0088**	0.01 U	**0.22**	**0.012**	**0.025**	0.01 U	**0.026**	**0.0034 B**	--	--		
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.069**	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	0.02 U	0.02 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--		

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-408D																						
		Sample Date	7/14/2010	1/5/2010	7/22/2009	1/15/2009	7/16/2008	1/8/2008	7/10/2007	2/13/2007	2/07 DUP	7/13/2006	7/06 DUP	1/15/2006	7/20/2005	2/7/2005	7/13/2004	1/24/2004	7/19/2003	1/16/2003	7/12/2002	1/15/2002	1/15/2002	7/17/2001	1/17/2001	1/01 DUP
		Unit	Post-ISCO												Pre-ISCO										
Field Parameters																										
Conductivity	*	mS/cm	0.784	0.640	0.841	0.230	0.838	0.928	0.785	0.822	0.822	0.718	0.718	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.61	2.07	2.11	6.26	0.37	0.31	0.68	0.52	0.52	0.7	0.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-65.2	-19.3	-60.6	-74.2	-67	-89.8	-70.3	-71.4	-71.4	-65.8	-65.8	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.48	5.94	6.49	0.772	6.33	6.47	6.42	6.59	6.59	6.41	6.41	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	24.1	16.76	25.75	18.39	23.05	19.70	21.75	19.19	19.19	22.77	22.77	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	21.7	8.91	4.81	8.3	9.68	1.35	6.25	1.63	1.63	3.13	3.13	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																										
Carbon Dioxide	*	µg/L	660 JB	540	590 *	510	580	< 1,000	< 1,000	--	--	410	420	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	37.9	36.1	38.2	36.2	36	35	33	35	37	54	57 N	58 N	45	41	40
Iron, as Ferrous (Fe+2)	*	mg/L	15 HF	26 HF	25 HF	13 HF	26	39.6	38.7	36.5	37.4	36.8	37	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	4.42	4.36	4.4	4.15	4.5	4.7	4.7	4.2	4.8	4.6	4.8	4.8	4.4	4.8	4.8
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	3.65 J	3.58 J	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	1,600	1,900	2,200	2,200	600	2,100	2,000	2,000	1,800	1,700	1,700	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 1.1	< 1.1	< 1.1	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25	0.25 U	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	18	18	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	0.74	0.74	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	1.3	1.3	1.1	1.3	1.6	2.1	1.9	1.5	2.6	1.2	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1	< 1	1 U	1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	2 U	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																										
Acetone	4,000	µg/L	**8.1 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50 R	< 50	50 R	50 R	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	**0.47 J**	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	**1.8**	**4.2**	**13**	**2.3**	**1.9**	**3.0**	**2.4**	**2.8**	**4.6**	**4.0**	**6.2**	**2.3**	**2.4**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5 J	< 5	5 U	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.48 JB**	**0.54 JB**
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	**8.6**	1.0 U	1.0 U	1.0 U	**0.2 J**	**2.7**	**9.3**	**8.3**	**12**	**1.1**	**1.7**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	**0.32 J**	**0.35 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	**8.8**	**11**	**8.2**	**12**	**8.4**	**9.3**	< 5	**8.1**	**8.3**	5 U	5 U	**4.7**	**7.7**	**14**	**7.0**	**6.8**	**13**	**8.9**	**18**	**34**	**32**	**36**	**6.3**	**6.9**
Semivolatile Organic Compounds																										
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	**26**	**27**	**36**	**26**	**26**	**30**	**37**	**12**	**60**	**59**	**38**	**25**	**24**
Acenaphthene	2,000	µg/L	**58**	**80**	**79**	**48**	**43**	**54**	**52**	**52**	**54**	**40**	**43**	**41**	**25**	**25**	**46**	**31**	**30**	**34**	**37**	**44**	**45**	**33**	**41**	**38**
Acenaphthylene	10	µg/L	**0.66**	< 1.9	< 0.21	< 3.8	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	**0.61 J**	10 U	**10**	10 U	10 U
Anthracene	10	µg/L	**1.6**	**2.4**	**2.8**	**1.5 J**	**2**	< 10	< 10	< 10	< 10	10 U	10 U	**1.7**	**1.1**	**0.84**	**1.3**	**1.2**	10 U	**1.2 J**	**0.97 J**	**0.96 J**	**1.4 J**	**0.79 J**	**1.2 J**	**1.4 J**
Benz(a)anthracene	0.1	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.053 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.037 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.1**	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	0.1 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.064 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	0.1 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	**1.5**	**1.1**	0.8 U	1.0 U	**1.4**	10 U	**1.6 J**	**1.9 J**	**2.1 J**	**2.3 J**	**1.6 J**	**2.0 J**	**2.0 J**
Fluoranthene	1,000	µg/L	**0.57**	< 1.9	**0.82**	**0.44 J**	**0.72**	< 10	< 10	< 10	< 10	10 U	10 U	**0.57**	**0.37**	0.8 U	1.0 U	**0.4**	10 U	**0.41 J**	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	**11**	**16**	**16**	**10**	**11**	**11**	**11**	**11**	**11**	10 U	10 U	**9.0**	**6.0**	**5.4**	**8.9**	**7.7**	10 U	**7.0 J**	**7.7 J**	**8.8 J**	**9.6 J**	**6.1 J**	**8.3 J**	**7.6 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.023 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**0.34**	< 1.9	< 0.21	**1.1 JB**	**0.31**	< 10	< 10	< 10	< 10	10 U	10 U	**1.0**	**7.3**	**52**	**1.7**	**4.2**	**15**	**15**	10 U	**41**	**39**	**33**	**5.8 J**	**5.4 J**
Phenanthrene	10	µg/L	**12**	**15**	**17**	**9.6**	**11**	**11**	**12**	**11**	**12**	10 U	10 U	**9.5**	**6.2**	**5**	**9.3**	**6.6**	10 U	**6.9 J**	**4.3 J**	**5.8 J**	**7.4 J**	**5.2 J**	**8.1 J**	**8.3 J**
Pyrene	1,000	µg/L	**0.5**	< 1.9	**0.84**	**0.52 J**	**0.64**	< 10	< 10	< 10	< 10	10 U	10 U	**0.56**	**0.36**	0.8 U	1.0 U	**0.37**	10 U	10 U	**0.57 J**	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																										
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	**0.32**	0.2 U	**0.056 B**	**10**	**11 N**	**11 N**	**4.9 N**	**1.6**	**1.1**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.020 U	0.02 U	**0.0062 B**	**0.0066 B**
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.010 U	**0.0037 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.64**	**0.62**	**0.64**	**0.66**	**0.63**	**0.627**	**0.628**	**0.667**	**0.671**	**0.696**	**0.687**	**0.684**	**0.628**	**0.7**	**0.74**	**0.72**	**0.6**	**0.72**	**0.72**	**0.76**	**0.77**	**0.68**	**0.69**	**0.7**
Beryllium	0.004	mg/L	**0.00023 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.0040 U	0.004 U	**0.0023 B**	**0.0017 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.0050 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**55.2**	**54.1**	**53**	**56**	**61**	**50**	**56**	**53**	**52**	**53**	**50**	**53**	**52**
Chromium	0.1	mg/L	**0.0021 J**	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0035 B**	**0.0041 B**	**0.0038 B**	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	-	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0056 B**	**0.013**	**0.013**	**0.013**	**0.0089 B**	**0.0053 B**	**0.005 B**
Copper	1.3	mg/L	**0.0033 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	**0.018 B**	**0.020 B**	**0.020**	**0.0076 B**	0.02 U	**0.0014 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.017**	< 0.002	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0026 B**	**0.0046 B**	**0.0046 B**	0.005 U	**0.0031 B**	**0.0028 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**31.5**	**29.2**	**29**	**30**	**32**	**27**	**31**	**33**	**33**	**34**	**30**	**28**	**28**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	**0.0018 J**	**0.0017 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	**0.0069 B**	**0.0069 B**	**0.0076 B**	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.64**	**4.8**	**4**	**6.5**	**3.8**	**5.0**	**4.1**	**4.0**	**3.9**	**3.7**	**4.2**	**4.2**
Selenium	0.05	mg/L	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**23**	**23.5**	**22**	**23**	**24**	**22**	**22**	**21**	**22**	**22**	**21**	**21**	**21**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.0020 U	0.0020 U	0.002 UN	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	**0.0097 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.045**	**0.050**	**0.052**	**0.022**	**0.0072 B**	**0.0059 B**
Zinc	2	mg/L	**0.013 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	**0.0224**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.052**	**0.075**	**0.066**	**0.031**	**0.011 B**	**0.0082 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-408DR								
		Sample Date	1/15/2015	7/16/2014	1/8/2014	7/10/2013	1/8/2013	7/25/2012	1/25/2012	7/5/2011	2/23/2011
		Unit	Post-ISCO								
Field Parameters											
Conductivity	*	mS/cm	1.310	0.645	0.630	0.755	0.597	0.390	0.170	0.619	3.360
Dissolved Oxygen (YSI)	*	mg/L	0.84	0.10	0.22	0.05	0.53	4.20	0.31	0.08	5.68
Oxidation Reduction Potential	*	mV	-103.5	-83.8	-55.5	-53.7	-61.8	-13.5	-136.0	-50.9	89.2
pH	*	SU	6.29	6.12	6.21	5.98	6.08	6.03	6.71	6.03	0.682
Temperature	*	Celsius	13.70	21.10	18.61	21.17	18.05	24.35	19.98	21.79	20.79
Turbidity	*	NTU	20.1	20.0	35.2	23.4	9.00	21.2	8.53	23.2	9.92
Monitored Natural Attenuation Parameters											
Carbon Dioxide	*	µg/L	137	192	272	235	130	140	2,200 B	1,500 B	1,600
Iron, as Ferrous (Fe+2)	*	mg/L	3.85	39.7	45.1	51.8	46 HF	25 HF	0.79 HF	19 HF	13 HF
Methane	*	µg/L	6,600	6800	6,700	6,800	7,500	3,000 *	860	2,400	3,700
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.36
Oxygen	*	mg/L	7.78 H	4.68 H	4.12 H	4.34 H	4.5	5	--	1.4	1.5
Sulfate	*	mg/L	< 1.0	< 1.0	<1.0	<1.0	< 5.0	< 5.0	250	< 2.6	< 2.6
Volatile Organic Compounds											
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	**19 J**
Benzene	5	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	**0.80 J**	< 0.25
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B**	< 1.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.38 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13
Xylenes, total	2,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	**2.2 J**	**2.8 J**
Semivolatile Organic Compounds											
Acenaphthene	2,000	µg/L	< 0.50	**41**	**32**	**17**	**32**	**30**	< 0.11	**32**	**16**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**0.40**	< 1.9	< 0.11	< 0.15	**0.22**
Anthracene	10	µg/L	< 0.050	**0.9**	**0.83**	**0.39**	**0.87**	< 1.9	< 0.11	**1.0**	**0.21**
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.050	< 0.066	< 0.042
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Fluoranthene	1,000	µg/L	< 0.10	**0.23**	**0.23**	**0.10**	**0.23**	< 1.9	< 0.11	**0.29**	< 0.094
Fluorene	1,000	µg/L	< 0.10	**1.9**	**2**	**1.3**	**2.7**	**2.2**	< 0.11	**4.0**	**2.0**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Naphthalene	20	µg/L	< 500	**31**	**0.57**	< 0.50	**0.27**	< 1.9	**0.57**	**0.24 J**	**0.23**
Phenanthrene	10	µg/L	< 0.50	**3.7**	**5.3**	**2.5**	**5.8**	**5.1**	< 0.11	**7.3**	**1.5**
Pyrene	1,000	µg/L	< 0.050	**0.15**	**0.16**	**0.065**	<0.22	< 1.9	< 0.11	**0.21 J**	< 0.094
Inorganic Compounds											
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053
Arsenic	0.05	mg/L	**0.429**	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.045**	< 0.0046	< 0.0046
Barium	2	mg/L	**0.448**	**0.496**	**0.575**	**0.569**	**0.56**	**0.58**	**0.26**	**0.52**	**0.50**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0018 J**	**0.0013 J**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0063 J**	**0.024**	< 0.0050
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	**0.000092 J**
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0024 J**	**0.0030 J**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024
Zinc	2	mg/L	< 0.0200	**0.132**	< 0.0200	< 0.0200	**0.038**	< 0.020	< 0.0087	< 0.0087	**0.018 J**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
RRS - Risk Reduction Standard

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-501S														
		Sample Date	1/15/2015	7/17/2014	1/13/2014	7/10/2013	1/9/2013	7/26/2012	1/19/2012	7/7/2011	1/19/2011	7/19/2010	1/5/2010	1/14/2009	7/15/2008	1/8/2008	2/14/2007
		Unit	Post-ISCO														
Field Parameters																	
Conductivity	*	mS/cm	0.642	0.510	0.546	0.840	0.693	0.782	0.748	0.730	6.080	0.903	0.832	0.869	0.971	1.101	1.058
Dissolved Oxygen (YSI)	*	mg/L	0.90	0.21	1.27	0.23	0.30	0.52	0.35	0.27	6.76	0.76	4.45	0.91	1.25	0.33	2.58
Oxidation Reduction Poten	*	mV	65.4	-165.2	142.8	-53.3	19.6	52.0	-56.3	-55.8	309.7	-58.2	-20.5	24.4	24	67.4	14.6
pH	*	SU	6.35	6.45	6.65	6.29	6.57	6.29	6.46	6.50	0.142	6.53	6.15	6.55	6.41	6.31	6.49
Temperature	*	Celsius	12.4	23.98	17.47	23.38	19.34	28.30	18.89	24.02	16.39	26.56	12.01	16.37	23.88	19.16	16.44
Turbidity	*	NTU	8.60	7.06	6.46	1.52	0.61	1.0	68.0	1.25	8.93	5.0	3.77	4.78	1.8	2.95	4.52
Monitored Natural Attenuation Parameters																	
Carbon Dioxide	*	µg/L	323	406	393	425	110	96	2,200	1,400 B	120	940 B	1,100	1,700	4,200	< 1000	< 1000
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	0.48	3.20	3.2	0.80 HF	< 0.10 HF	2.6	3.2 HF	0.074 JHF	<0.10 HF	1.2 HF	0.38 HF	0.56	0.25	< 1.0
Methane	*	µg/L	< 4	170	28	97	9.8	1.7	21	7.0	< 0.19	3.6	31	16	2.2	9.9	19
Nitrate	*	mg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	<1.1	<1.1	0.030 J	<0.50	< 0.25	0.63
Oxygen	*	mg/L	8.62 H	7.4 H	7.39 H	6.71 H	6.1	7.9	1.2	2.1	1.6	1.1	1.4	1.1	0.80	2.1	5.7
Sulfate	*	mg/L	61	62	89	81	75	82	80	81	11	140	160	150	150	160	150
Volatile Organic Compounds																	
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	**7.6 J**	< 50	< 50
Benzene	5	µg/L	**35**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.37 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	**1.9 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	5.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.20 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	**7.4**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.91 J**	< 5.0	< 5.0	< 5.0	**0.4 J**	< 5.0	< 5.0
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes, total	2,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Semivolatile Organic Compounds																	
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	**0.031 J**	<0.050	<0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	**0.20**	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.042	< 0.044	< 0.043	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	**0.050 J**	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050
Naphthalene	20	µg/L	**5.0**	< 0.50	< 0.50	< 0.50	<0.20	< 0.19	**0.21**	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	**0.21**	< 10	< 10
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	<0.19	**0.023 J**	**0.063 J**	< 10	< 10
Inorganic Compounds																	
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	**0.0053 J**	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0073 J**	< 0.0046	< 0.0046	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500
Barium	2	mg/L	**0.103**	**0.165**	**0.117**	**0.184**	**0.17**	**0.15**	**0.25**	**0.17**	**0.015**	**0.14**	**0.19**	**0.12**	**0.13**	**0.0754**	**0.290**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00028 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	**0.0153**	< 0.0050	**0.0375**	< 0.0050	<0.0050	**0.0083**	**0.0085**	< 0.0020	**0.012**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0023 J**	**0.0015 J**	**0.0026 J**	**0.0016 J**	<0.010	**0.0016 J**	**0.0020 J**	< 0.0100	**0.0296**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.014 JB**	**0.0022 J**	< 0.020	< 0.020	< 0.020	< 0.0100	**0.0403**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	**0.018**	< 0.010	**0.0070 J**	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	**0.0342**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	**0.0045 J**	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0045 J**	< 0.0024	**0.0029 J**	< 0.010	< 0.010	< 0.010	**0.0020 J**	< 0.0100	**0.0387**
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.043**	**0.0265**	< 0.020	< 0.020	**0.033**	< 0.0087	**0.026**	**0.010 J**	<0.020	**0.032**	< 0.020	< 0.0200	**0.0939**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
< - Analyte not detected at referenced detection limit

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	1/14/2014	1/14 DUP	1/10/2013	1/13 DUP	7/25/2012	7/2012 DUP	1/19/2011	01/11 DUP	7/7/2011	1/19/2011	7/19/2010	1/12/2010	1/10 DUP	7/23/2009	1/21/2009	7/21/2008	1/8/2008	7/10/2007	07/07 DUP	2/14/2007
Field Parameters																						
Conductivity	*	mS/cm	0.626	0.626	1.157	1.157	0.707	0.707	0.690	0.690	0.693	0.890	0.800	0.709	0.709	0.69	0.350	0.677	0.819	0.642	0.642	0.794
Dissolved Oxygen (YSI)	*	mg/L	0.27	0.27	0.33	0.33	0.66	0.66	1.00	1.00	0.30	6.11	0.46	0.15	0.15	0.08	5.95	0.28	0.23	0.41	0.41	1.66
Oxidation Reduction Potent	*	mV	-48.5	-48.5	-106.8	-106.8	-46.0	-46.0	-43.7	-43.7	-27.0	-60.6	-87.4	-18.2	-18.2	-40.9	-40	-48.7	-48.1	-12.0	-12.0	-30
pH	*	SU	6.02	6.02	6.52	6.52	6.12	6.12	6.04	6.04	5.46	0.713	6.25	6.73	6.73	5.9	0.629	5.86	5.88	5.88	5.88	6.02
Temperature	*	Celsius	20.32	20.32	15.30	15.30	23.85	23.85	21.50	21.50	25.93	19.65	27.39	17.29	17.29	23.33	18.42	25.86	21.87	23.16	23.16	20.39
Turbidity	*	NTU	8.70	8.70	79.30	79.30	>999	>999	9.70	9.70	67.6	289	67	NM	NM	6.5	3	9.36	63.2	68.3	68.3	2.34
Monitored Natural Attenuation Parameters																						
Carbon Dioxide	*	µg/L	621	713	270	270	400	370	7,100 B	7,000 B	5,500 B	4,600	4,500 B	4,700	4,300	4,600	4,400	3,900	< 1000	< 1000	< 1000	--
Iron, as Ferrous (Fe+2)	*	mg/L	45	52.5	14 HF	14 HF	48 HF	44 HF	52 HF	55 HF	56 HF	28 HF	50 HF	59 HF	59 HF	59 HF	36 HF	31	78.0	67.6	70.5	76.2
Methane	*	µg/L	8,700	16,000	10,000	9,500	9,300	11,000	7,100	7,800	6,500	8300	7400	14000	14000	12000	10000	3300	9,100	11,000	12,000	15,000
Nitrate	*	mg/L	< 0.25	< 0.25	< 2.5	< 2.5	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25
Oxygen	*	mg/L	< 1.00	1.01 H	2.0	2.3	1.5	2.1	1.2	1.1	0.82	0.84	0.81	0.74	0.87	0.53	0.75	0.49	0.73	1.0	0.72	0.24 J
Sulfate	*	mg/L	< 1.0	< 1.0	< 100	< 100	< 5.0	< 5.0	< 2.6	< 2.6	< 2.6	< 2.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	1.3	< 1.0	< 1
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 2,000	< 2,000	< 2,000	< 100	< 100	< 250	< 100	< 100	< 1000	< 2000	< 2000	< 2000	< 2000	< 1000	**120**	< 5,000 J	< 5,000 J	< 50
Benzene	5	µg/L	**430**	**450**	**430**	**400**	**410**	**370 D**	**440**	**510**	**420**	**530**	**430**	**720**	**690**	**500**	**430**	**680**	**1,300**	**660**	**660**	**1,000**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 100	<100	< 100	< 5.0	< 12	< 30	< 12	< 12	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	**1,500**	**1,600**	**2,600**	**2,700**	**1,100**	**850 D**	**1,600**	**1,600**	**1,400**	**1,700**	**1000**	**1900**	**1800**	**1400**	**1100**	**1800**	**1,400**	**2,400**	**2,400**	**3,300**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 100	<100	< 100	< 5.0	< 20	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 50	< 5.0	< 5	< 5	< 5
Toluene	1,000	µg/L	**67**	**69**	**170**	**210**	< 100	**54**	**72 J**	**120 J**	**110**	**140**	**120**	**250**	**230**	**160**	**170**	**280**	**310**	**390**	**400**	**860**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 100	<100	< 100	< 5.0	< 2.6	< 6.5	< 2.6	< 2.6	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	**1,000**	**1,100**	**2,400**	**2,600**	**780**	**520**	**1,200**	**1,200**	**1,100**	**1,600**	**880**	**1800**	**1800**	**1200**	**1000**	**1600**	**2,100**	**2,300**	**2,400**	**3,700**
Semivolatile Organic Compounds																						
Acenaphthene	2,000	µg/L	**130**	**130**	**3,800**	**6,200**	< 190	190	**200**	**180**	**140**	**4,300**	**110**	**570**	**120**	**110**	**63**	**49**	**83**	**79**	**92**	**110**
Acenaphthylene	10	µg/L	**13**	**13**	**1,900**	**3,100**	< 190	< 190	**67**	**39**	**88**	**2,700**	**53**	**640**	**130**	**82**	**44**	**46**	**64**	**61**	**71**	**130**
Anthracene	10	µg/L	**7.4**	**7.4**	**2,000**	**3,200**	< 190	< 190	**43**	**11**	**39**	**2,800**	**14**	**400**	**49**	**22**	6.5 J	4.4	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	**1.5**	**1.6**	**1,300**	**2,100**	< 190	< 190	**35**	**2.9**	**25**	**1,300**	**6.6**	**210**	<19	**12**	< 38	< 4.2	**1.1**	**1.0**	**1.1**	**0.14**
Benzo(a)pyrene	0.2	µg/L	**1.4**	**1.4**	**1,100**	**1,900**	< 190	< 190	**35**	**3.0**	**20**	**1,200**	**5.4**	**190**	<19	**7.9**	< 38	< 4.2	**0.85**	**0.53**	**0.59**	**0.16**
Benzo(b)fluoranthene	0.2	µg/L	**1**	**1**	**1,100**	**1,800**	< 190	< 190	**27**	**2.4**	< 2.0	**520**	< 1.9	<100	<19	**7.9**	< 38	< 4.2	**0.58**	**0.48**	**0.51**	**0.1**
Benzo(g,h,i)perylene	10	µg/L	**0.61**	**0.61**	**330**	**530**	< 190	< 190	**14**	**1.5 J**	**5.7**	**380**	1.7 J	<100	<19	< 3.8	< 38	< 4.2	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	**0.4**	**0.47**	<21	<22	< 190	< 190	**13**	**1.1 J**	**16**	**720**	**3.3**	<100	<19	< 3.8	< 38	< 4.2	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	**1.1**	**1.2**	**960**	**1,600**	< 190	< 190	**28**	**2.6**	**19**	**1,100**	**5.3**	**190**	<19	**10**	< 38	< 4.2	**0.78**	**0.58**	**0.62**	**0.16**
Dibenzo(a,h)anthracene	0.3	µg/L	**0.13**	**0.14**	**130**	<22	< 190	< 190	**4.5**	< 1.1	**2.1 J**	< 110	< 1.9	<100	<19	< 3.8	< 38	< 4.2	<0.1	<0.1	< 10	< 0.1
Fluoranthene	1,000	µg/L	**4.1**	**4**	**2,400**	**3,800**	< 190	< 190	**53**	**7.9**	**37**	**2,500**	**12**	**410**	**36**	**23**	**4.0 J**	**1.6**	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**38**	**38**	**3,000**	**5,100**	< 190	< 190	**92**	**63**	**130**	**4,600**	**55**	**650**	**82**	**67**	**25 J**	**25**	**34**	**34**	**40**	**50**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.49**	**0.51**	**330**	**480**	< 190	< 190	**12**	**1.3 J**	**5.5**	**310**	1.5 J	<100	<19	< 3.8	< 38	< 4.2	**0.30**	**0.22**	**0.23**	**0.11**
Naphthalene	20	µg/L	**4,900**	**4,300**	**29,000**	**50,000**	**4,100**	**4,700**	**6,300**	**7,700**	**3,900**	**46,000**	**3,400**	**9,200**	**6,100**	**5,200**	**3,100**	**3,300**	**4,300**	**4,100**	**4,000**	**4,800**
Phenanthrene	10	µg/L	**38**	**37**	**7,700**	**13,000**	< 190	< 190	**170**	**65**	**170**	**7,800**	**67**	**1,200**	**140**	**89**	**30 J**	**23**	**34**	**31**	**37**	**51**
Pyrene	1,000	µg/L	**6.3**	**6.3**	**3,700**	**6,100**	< 190	< 190	**68**	**10**	**72**	**3,800**	**20**	**670**	**47**	**40**	5.4 J	**2.4**	< 10	< 10	< 10	< 10
Inorganic Compounds																						
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	**0.0070 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.671**	**0.665**	**0.59**	**0.58**	**0.68**	**0.67**	**0.66**	**0.71**	**0.64**	**0.63**	**0.74**	**0.68**	**0.69**	**0.74**	**0.66**	**0.68**	**0.612**	**0.648**	**0.632**	**0.694**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00050 J**	**0.00052 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00020 J**	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.00062	< 0.0050	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0019 J**	**0.0020 J**	**0.0045 J**	**0.0085 J**	**0.023**	<0.010	<0.010	**0.046**	**0.0017 JB**	**0.0021 J**	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0027 J**	**0.0080 JB**	**0.015 J**	<0.020	<0.020	**0.039**	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	**0.012**	**0.018**	**0.013**	**0.012**	**0.011**	**< 0.010**	**0.0080 J**	**0.010**	**0.014**	**0.012**	**0.01**	**0.016**	**0.013**	**0.018**	**0.012**	**0.014**	**0.013**	< 0.010	< 0.010	0.008
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	**0.0049 J**	**0.0047 J**	**0.0072 J**	< 0.040	< 0.040	< 0.040	**0.0017 J**	**0.0030 J**	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	**0.0030 J**	**0.0063 J**	**0.02**	**0.014**	<0.010	**0.047**	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	**0.013 J**	**0.023**	<0.020	<0.020	**0.048**	< 0.020	< 0.020	< 0.0200	**0.0354**	**0.0256**	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Sample not collected due to DNAPL
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-505D																			
		Sample Date	1/15/2015	7/15/2014	1/8/2014	7/11/2013	1/8/2013	7/26/2012	1/24/2012	7/5/2011	07/11 DUP	1/18/2011	7/14/2010	1/6/2010	7/28/2009	07/09 DUP	01/09 DUP	1/20/2009	7/15/2008	1/9/2008	7/11/2007	2/15/2007
		Unit	Post-ISCO																			
Field Parameters																						
Conductivity	*	mS/cm	0.434	0.660	0.591	0.631	0.523	0.565	0.307	0.558	0.558	2.240	0.540	0.432	0.538	0.538	4.420	4.420	0.514	0.607	0.554	0.649
Dissolved Oxygen (YSI)	*	mg/L	0.29	0.10	0.90	0.22	0.44	1.32	3.82	0.23	0.23	6.4	0.64	0.51	3.17	3.17	6.1	6.1	0.23	0.22	0.28	0.64
Oxidation Reduction Potent	*	mV	-67	-67.3	-37.8	-44.8	8.7	-33.0	-18.2	-34.9	-34.9	-47.8	-167.7	2.9	-9.0	-9.0	100	100	-179.4	-59.0	-9.6	-35.0
pH	*	SU	6.07	6.15	6.15	6.14	6.05	6.26	6.29	6.15	6.15	0.484	6.18	6.82	6.28	6.28	0.422	0.422	6.08	6.11	6.08	6.15
Temperature	*	Celsius	15.7	22.37	18.21	21.77	17.92	22.01	20.25	23.87	23.87	17.63	22.14	14.21	22.53	22.53	15.99	15.99	22.56	19.12	22.09	17.49
Turbidity	*	NTU	9.8	6.69	7.15	4.40	0.70	3.01	8.71	5.77	5.77	22.9	6.7	5.23	5.8	5.8	2.9	2.9	9.63	5.28	4.2	6.87
Monitored Natural Attenuation Parameters																						
Carbon Dioxide	*	µg/L	499	285	632	375	240	140	2,600 B	2,400 B	2,200 J B	2,100	2,100 B	1,400	1,800 *	1,800 *	1,100	910	1,600	< 1,000	< 1,000	--
Iron, as Ferrous (Fe+2)	*	mg/L	23.4	38.1	30.6	31.6 H	27 HF	14 HF	5.8 HF	13 HF	13 HF	23 HF	21 HF	23 HF	6.2 HF	7.3 HF	< 0.10 HF	< 0.10 HF	19	23.4	29.0	28.5
Methane	*	µg/L	9,800	7,000	6,400	6,900	6,100	1,500	1,100	1,900	1,300	2,500	1700	1400	440	< 0.19	1000	270	350	1,000	2,900	2,400
Nitrate	*	mg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	0.12 J	< 0.075	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.050	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25
Oxygen	*	mg/L	7.58 H	4.81 H	6.54 H	5.10 H	4.6	6.3	1.6	1.4	1.5	1.2	1.3	2.0	1.1	1.1	1.4	1.4	1.0	1.6	0.99	1.5
Sulfate	*	mg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.6	3.9 J	4.0 J	5.3	8.2	11	16	17	17	18	21	30	20	17
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	**5.5 J**	< 5.0	< 5.0	**7.8 J**	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.2 J**	**2.2 J**	**2.5 J**	**2.5 J**	**1.8 J**	< 5.0	< 5.0	< 5.0	**2.6 J**	**1.8 J**	**3.1 J**	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	**13**	**34**	**67**	**64**	**79**	< 5.0	**0.35 J**	**0.17 J**	**0.21 J**	**0.25 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.4 J B ***	**2.8 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.53 J**	**0.58 J**	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**11**	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	**6.8**	**14**	**59**	**43**	**61**	< 5.0	**0.96 J**	**0.31 J**	**0.55 J**	**0.91 J**	**0.27 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																						
Acenaphthene	2,000	µg/L	< 0.50	**47**	**55**	**56**	**6.6**	**36**	**87**	**51**	**71**	**63**	**36**	**48**	**51 D**	**52 D**	**34**	**29**	**54**	**53**	**37**	**33**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	**1.1**	**2.5**	< 2.0	**7.7**	**7.6**	**14**	**18**	**17**	**14**	**23**	**26 D**	**25 D**	**17**	**16**	**14**	**40**	**20**	**20**
Anthracene	10	µg/L	< 0.050	**0.8**	**1.3**	**1.0**	< 2.0	< 1.9	**0.54**	**0.16 J**	**0.26**	**0.14 J**	< 0.19	<0.99	< 0.19	< 0.20	**0.055 J**	**0.056 J**	**0.064 J**	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	**0.29**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	**0.051**	**0.16**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	**0.36**	< 0.10	< 0.10	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	**0.11**	< 0.10	< 0.10	< 0.10	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	**0.3**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	**0.38**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.048	< 0.068	< 0.10	< 0.043	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	**0.11**	**0.31**	< 0.10	< 0.10	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	**0.8**	**1.1**	**1.3**	< 2.0	< 1.9	**0.92**	**0.70**	**0.90**	**0.78**	**0.59**	**1.1**	**0.87**	**0.8**	**0.37**	**0.3**	**0.31**	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	**6.1**	**9.5**	**12**	< 2.0	**5.3**	**13**	**10**	**14**	**10**	**3.5**	**5.4**	**7.1**	**7.2**	**4.5**	**3.9**	**5.2**	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.10**	**0.054**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**4.2**	**590**	**840**	**870**	**83**	**49**	**15**	**5.0**	**6.3**	**4.5**	0.18 J	<0.99	< 0.19	< 0.20	**2.3**	**2.3**	**0.16 J**	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.50	**4.1**	**8.1**	**7.1**	< 2.0	< 1.9	**2.7**	**0.70**	**1.2**	**0.49**	< 0.19	<0.99	< 0.19	< 0.20	**0.061 J**	**0.058 J**	**0.074 J**	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	**0.99**	**1.2**	**1.1**	< 2.0	< 1.9	**0.87**	**0.67**	**0.93**	**0.84**	**0.66**	**1.1**	**0.98**	**0.92**	**0.33**	**0.3**	**0.35**	< 10	< 10	< 10
Inorganic Compounds																						
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.342**	**0.468**	**0.373**	**0.395**	**0.34**	**0.32**	**0.23**	**0.45**	**0.42**	**0.33**	**0.46**	**0.44**	**0.44**	**0.44**	**0.36**	**0.3**	**0.33**	**0.314**	**0.458**	**0.436**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0012 J**	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.026**	**0.0057 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0092 J**	**0.0033 J**	< 0.0023	**0.0035 J**	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0046 J**	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0202**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.022**	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.010 J**	**0.013 J**	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
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R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
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UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-600								MW-601									MW-602								MW-603					
			1/14/2015	7/16/2014	1/8/2014	7/11/2013	07/13 DUP	1/10/2013	7/26/2012	1/25/2012**	1/14/2015	7/16/2014	1/8/2014	7/11/2013	1/10/2013	7/25/2012	1/19/2012	7/6/2011	1/20/2011	1/13/2015	7/15/2014	1/7/2014	7/9/2013	1/7/2013	7/23/212	1/17/2012	7/6/2011	1/18/2011	7/11/2013	1/9/2013	7/26/2012	1/17/2012	7/6/2011	1/18/2011
			Post-ISCO								Post-ISCO									Post-ISCO													
Field Parameters																																	
Conductivity	*	mS/cm	0.257	0.529	0.416	0.293	0.293	0.396	0.375	0.430	0.529	0.565	0.421	0.543	0.569	0.658	0.649	0.645	0.46	0.613	0.683	0.627	0.193	0.576	0.683	0.82	0.801	0.704	1.030	0.896	0.484	0.874	0.918	0.839
Dissolved Oxygen (YSI)	*	mg/L	0.18	0.43	0.58	0.26	0.26	0.79	1.2	0.46	0.28	0.23	0.24	0.34	0.19	2.94	0.15	0.25	0.22	0.62	0.12	0.47	0.12	0.37	0.23	0.76	0.35	0.42	0.17	0.61	0.93	7.19	0.11	0.51
Oxidation Reduction Poten	*	mV	-71.3	-73.9	-43.7	-24.1	-24.1	8.7	-32.1	-29.0	-42.8	-137.3	-66.0	-121.2	-103.8	-81.0	-80.0	-84.5	-77.0	-33	-56.6	-30.5	-30.1	-7.1	-73.8	-89.3	-47.7	-81.7	-63.7	4.3	-34.8	-60.2	-57.5	-51.1
pH	*	SU	6.1	6.33	6.45	6.70	6.70	6.61	6.70	6.22	5.92	6.05	6.22	6.01	5.96	5.22	6.16	6.00	5.85	5.77	6.00	6.05	6.79	6.07	5.46	6.48	6.10	6.55	5.89	6.19	6.02	6.56	6.01	5.9
Temperature	*	Celsius	17.9	22.93	21.27	21.54	21.54	26.44	24.33	22.87	15.8	23.11	18.95	21.41	22.47	25.42	22.04	22.88	19.84	17.4	22.36	18.36	24.76	18.15	24.51	20.97	23.69	17.93	23.02	19.27	25.63	18.84	22.66	17.21
Turbidity	*	NTU	53	45.8	19.9	9.60	9.60	24.20	8.05	> 999	3.12	8.56	8.79	8.16	9.14	3.27	1.1	26.2	16.9	15.5	9.45	4.16	5.42	2.04	2.59	8.17	181	7.34	1.28	3.79	5.02	6.36	31.7	6.68
Monitored Natural Attenuation Parameters																																	
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																	
Acetone	4,000	µg/L	< 25,000	< 25,000	< 2,500	< 2,500	< 2,500	< 20,000	< 5,000	< 100	< 5,000	< 5,000	< 5,000	< 2,500	< 2,500	< 25,000	< 1,300	**740 J**	< 500	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0
Benzene	5	µg/L	**25,000**	**25,000**	**20,000**	**7,000**	**5,900**	**26,000**	**48,000 D**	**440**	**6,900**	**31000**	**18,000**	**18,000**	**28,000**	**27,000**	**21,000**	**22,000 D**	**14,000**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**110**	**2.1 J**	< 0.25	**1,300**	< 5.0	< 5.0	< 5.0	**2.0 J**	**2.3 J**	**3.5 J**
Carbon Disulfide	4,000	µg/L	< 2,500	< 2500	< 250	< 250	< 250	<1,000	< 250	< 12	< 500	< 500	< 500	< 250	<130	< 1,300	< 150	< 60	< 60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 6.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60
Ethylbenzene	700	µg/L	< 250	< 2500	**2,400**	**990**	**760**	**1,300**	**1,300**	**1,600**	**960**	**1,600**	**1,300**	**1,000**	**950**	< 1,300	**950 J**	**890**	**440 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3.0 J**	**0.11 J**	< 0.11	**38 J**	**74**	**82**	**88**	**120**	**98**	**110**
Methylene Chloride	5	µg/L	< 5.0	< 2500	< 250	< 250	< 250	<1,000	< 250	< 20	< 5.0	< 500	< 500	< 250	<130	< 1,300	< 250	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J**	< 1.0
Toluene	1,000	µg/L	**8,500**	**17,000**	**12,000**	**5,300**	**4,300**	**12,000**	**24,000 D**	**72 J**	**2,100**	**16,000**	**6,100**	**8,700**	**13,000**	**11,000**	**8,800**	**10,000**	**7,400**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.34 J**	< 0.33	< 0.33	< 3.3	< 5.0	< 5.0	< 5.0	**3.0 J**	**2.4 J**	**2.7 J**
Trichloroethylene	5	µg/L	< 2,500	< 2500	< 250	< 250	< 250	<1,000	< 250	< 2.6	< 500	< 500	< 500	< 250	<130	< 1,300	< 33	< 13	< 13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 1.3	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13
Xylenes, total	2,000	µg/L	2,600	**4,600**	**3,700**	**2,100**	**1,600**	**3,000**	**5,100 D**	**1,200**	**1,900**	**4,200**	**2,500**	**3,400**	**3,700**	**3,800**	**3,300**	**3,700**	**3,000**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.5 J**	**0.45 J**	< 0.20	**30 J**	**39**	**40**	**51**	**69**	**45**	**63**
Semivolatile Organic Compounds																																	
Acenaphthene	2,000	µg/L	**14**	**9.2**	**21**	**6.2**	**6.3**	< 22	< 190	**200**	**12**	**4.6**	**14**	**18**	**19**	< 210	**18**	**12**	**16**	**1.6**	**1.9**	**3.5**	< 0.50	**4.3**	**11**	**6.7**	**4.3**	**0.5**	**40**	**100**	< 190	**85**	**64**	**64**
Acenaphthylene	10	µg/L	**120**	**210**	**190**	**53**	< 100	**93**	< 190	**67**	**45**	**70**	**50**	**64**	**81**	< 210	**75**	**65**	**68**	< 1.0	< 1.0	< 1.0	< 1.0	< 0.22	< 0.50	**0.18 J**	**0.23**	**34**	< 1.0	**31**	< 190	**4.1**	**1.9**	**1.3 J**
Anthracene	10	µg/L	**2.4**	**8.9**	**5.6**	**1.5**	**1.7**	< 22	< 190	**43**	**4.4**	**4.7**	**7.7**	**6.7**	< 19	< 210	**7.1 J**	**5.2 J**	**5.5**	**0.1**	**0.17**	**0.16**	< 0.050	< 0.22	< 0.50	< 0.10	**0.10 J**	**0.43**	**1.6**	<10	< 190	< 1.0	**3.3**	**3.8**
Benz(a)anthracene	0.1	µg/L	**0.38**	**2.8**	**0.97**	< 0.50	**0.31**	< 22	< 190	**35**	< 0.050	**0.24**	**0.4**	< 0.50	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	**0.11 J**	< 0.99
Benzo(a)pyrene	0.2	µg/L	**0.3**	**2.1**	**0.72**	< 0.50	**0.23**	< 22	< 190	**35**	< 0.050	< 0.050	< 0.050	< 0.50	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	< 0.095	< 0.99
Benzo(b)fluoranthene	0.2	µg/L	**0.28**	**1.8**	**0.47**	< 1.0	**0.19**	< 22	< 190	**27**	< 0.10	< 0.10	< 0.1	< 1.0	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.10	<10	< 190	< 1.0	< 0.095	< 0.99
Benzo(g,h,i)perylene	10	µg/L	**0.16**	**0.79**	**0.26**	< 1.0	< 0.10	< 22	< 190	**14**	< 0.10	< 0.10	< 1.0	< 1.0	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.10	<10	< 190	< 1.0	< 0.095	< 0.99
Benzo(k)fluoranthene	10	µg/L	**0.085**	**0.68**	**0.18**	< 0.50	**0.096**	< 22	< 190	**13**	< 0.050	< 0.050	< 0.050	< 0.50	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	< 0.095	< 0.99
Chrysene	0.2	µg/L	**0.3**	**2.1**	**0.66**	< 0.50	**0.26**	< 22	< 190	**28**	< 0.050	< 0.050	< 0.050	< 0.50	<1.9	< 210	< 2.2	< 2.1	< 0.45	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.23	< 0.046	< 0.045	< 0.045	< 0.050	<10	< 190	< 0.46	**0.078 J**	< 0.44
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	**0.2**	< 0.10	**< 1.0**	< 0.10	< 22	< 190	**4.5**	< 0.10	< 0.10	< 0.1	< 1.0	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.10	<10	< 190	< 1.0	< 0.095	< 0.99
Fluoranthene	1,000	µg/L	**1.2**	**6.9**	**3.2**	**1.0**	**1.2**	< 22	< 190	**53**	**0.49**	**0.4**	**0.67**	< 1.0	< 19	< 210	< 4.8	< 4.7	**2.3**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	**0.14 J**	< 0.095	**0.11 J**	**0.78**	<10	< 190	< 1.0	**1.1**	**1.0 J**
Fluorene	1,000	µg/L	**20**	**48**	**39**	**12**	**16**	< 22	< 190	**92**	**36**	**0.19**	**42**	**53**	**64**	< 210	**63**	**50**	**60**	0.22	**0.31**	**0.69**	< 0.10	**0.55**	**1.6**	**0.47**	**0.64**	**5.5**	**9.3**	**29**	< 190	**20**	**21**	**22**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.11**	**0.69**	**0.21**	< 0.50	**0.065**	< 22	< 190	**12**	< 0.050	< 0.050	< 0.050	< 0.50	<1.9	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	< 0.095	< 0.96
Naphthalene	20	µg/L	**5,400**	**10,000**	**7,700**	**2,500**	**2,900**	**5,700**	**8,200**	**6,300**	6,500	**8,700**	**8,400**	**9,900**	**11,000**	**11,000**	**770**	**8,900**	**9,800**	<500	< 0.50	< 0.50	< 0.50	< 0.22	**65**	**0.34**	**0.15 J**	**330**	**490**	**1,000**	**1,100**	**1,400 D**	**840**	**930**
Phenanthrene	10	µg/L	**15**	**53**	**36**	**9.8**	**9.6**	< 22	< 190	**170**	**17**	**16**	**25**	**25**	**35**	< 210	**38**	**25**	**44 ***	< 0.50	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	**1.2**	**8.4**	**22**	< 190	**13**	**16 J**	**18**
Pyrene	1,000	µg/L	**1.8**	**8.5**	**3.8**	**1.2**	**1.4**	< 22	< 190	**68**	**0.47**	**0.49**	**1**	**0.76**	< 19	< 210	< 4.8	< 4.7	**1.5 J**	< 0.050	**0.054**	**0.08**	< 0.050	< 0.22	< 0.50	**0.22**	**0.11 J**	**0.12 J**	**0.71**	<10	< 190	< 1.0	**1.4**	**1.3 J**
Inorganic Compounds																																	
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0096 J**	**0.011 J**	**0.0054 J**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	**0.0048 J**
Barium	2	mg/L	**0.157**	**0.315**	**0.197**	**0.0615**	**0.0613**	**0.097**	**0.25**	**0.66**	**0.275**	**0.169**	**0.249**	**0.270**	**0.28**	**0.29**	**0.3**	**0.27**	**0.2**	**0.491**	**0.553**	**0.583**	**0.137**	**0.38**	**0.4**	**0.57**	**0.61**	**0.36**	**0.808**	**0.67**	**0.74**	**0.84**	**0.82**	**0.75**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	**< 0.00020**	**0.00029 JB**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	**0.00048 J**	< 0.00020	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0019 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0019 J**	**0.0041 J**	**0.0022 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	**0.0031 J**	**0.0045 J**	< 0.0012	< 0.0100	< 0.010	< 0.010	**0.0016 J**	**0.0034 J**	**0.0022 J**
Copper	1.3	mg/L	**0.0312**	< 0.0100	**0.0351**	**0.0292**	**0.0298**	**0.021**	< 0.020	< 0.0019	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0073 J**	**0.0062 JB**	**0.0221**	< 0.0100	< 0.0100	**0.0117**	< 0.020	**0.0049 J**	< 0.0019	**0.02**	< 0.0019	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0024 J**	< 0.0019
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0080 J**	**0.022**	**0.048**	**0.025**	**0.026**	**0.035**	**0.041**	**0.048**	**0.061**	**0.029**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.0050	**0.01**	< 0.0050
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	**0.0088 J**	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0034 J**	**0.0026 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0024 J**	< 0.0023	**0.0027 J**	< 0.0023	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	**0.0102**	< 0.0100	< 0.0100	< 0.0100	<0.010	**0.015**	< 0.0024	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0024 J**	**0.0040 J**	**0.0029 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	**0.0044 J**	< 0.0024	**0.013**	< 0.0024	< 0.0100	< 0.010	< 0.010	**0.0024 J**	**0.0035 J**	< 0.0024
Zinc	2	mg/L	**0.208**	**0.058**	**0.288**	**1.53**	**1.59**	**0.099**	**0.15**	< 0.0087	**0.0379**	**0.0564**	**0.121**	**0.0291**	**0.077**	< 0.020	< 0.0087	**0.029**	**0.028**	**0.165**	**0.0299**	**0.0432**	**0.583**	**0.4**	**0.17**	< 0.0087	**0.19**	< 0.0087	< 0.0200	**0.021**	< 0.020	< 0.0087	**0.02**	< 0.0087

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
** Monitoring well had NAPL detected

JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Summary of Historical Groundwater Sampling Data – Transition Zone and Bedrock Monitoring Wells

Appendix E2

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-213																		
		Sample Date	1/13/2015	7/15/2014	1/8/2014	7/10/2013	1/9/2013	7/25/2012	1/18/2012	7/5/2011	1/19/2011	7/13/2010	1/12/2010	7/22/2009	1/20/2009	7/23/2008	1/10/2008	8/21/2007**	7/11/2007	2/13/2007	10/3/2006	4/4/2002
		Unit	During Extraction																		Pre-Extraction	
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	<2,500	< 50	< 5,000	< 5,000	< 250	< 250	< 250	< 5000	< 5000	< 1000	< 1000	< 5000	< 50	< 5,000	< 50	< 50	50 U	--
Benzene	5	µg/L	**8,900**	**950**	**6,000**	**7,100**	**8,300**	**6,500**	**5,100**	**6,700**	**6,000**	**5,100**	**6,500**	**4,500**	**870**	**4,600**	**4,300**	**2,500**	--	**750**	5 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	<250	< 5.0	< 250	< 250	< 30	< 30 *	< 30	< 250	< 250	< 50	< 50	< 250	< 5.0	< 500	< 5	< 5	5 U	--
Ethylbenzene	700	µg/L	**1,500**	**110**	**1,300**	**1,300**	**1,600**	**1,100**	**1,000**	**1,200**	**1,400**	**1,100**	**1,700**	**1,300**	**260**	**930**	**1,300**	**740**	--	**470**	5 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	<250	< 5.0	< 250	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 250	< 5.0	< 500	< 5	< 5	5 U	5.0 U
Toluene	1,000	µg/L	**460**	**59**	**800**	**720**	**640**	**670**	**710**	**960**	**950**	**810**	**1,700**	**1,400**	**5.3 J**	**1,400**	**1,700**	**1,200**	--	**590**	5 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	<250	< 5.0	< 250	< 250	< 6.5	< 6.5	< 6.5	< 250	< 250	< 50	< 50	< 250	< 5.0	< 500	< 5	< 5	5 U	1.0 U
Xylenes, total	2,000	µg/L	**1,300**	**95**	**1,300**	**1,800**	**1,400**	**1,100**	**950**	**1,100**	**1,500**	**1100**	**2100**	**1500**	**330**	**1200**	**1,500**	**1,600**	--	**370**	5 U	--
Semivolatile Organic Compounds																						
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	2,000	µg/L	**180**	**9.1**	**52**	**63**	< 220	< 210	**67**	**32**	**25**	**29**	**54**	**58**	**28**	**16**	**35 J**	--	**20**	**15**	10 U	10 U
Acenaphthylene	10	µg/L	**180**	< 1.0	<1,000	**82**	< 220	< 210	**170**	**86**	**53**	**38**	**98**	**100**	**2.6**	**55**	**140 J**	--	**81**	**40**	10 U	**0.81 J**
Anthracene	10	µg/L	**7.9**	**0.43**	**3.1**	**2.7**	< 220	< 210	**4.1**	**2.3**	< 10	**1.1 J**	**2.8**	< 9.7	**0.27 J**	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Benzo(a)anthracene	0.1	µg/L	< 0.5	< 0.050	**0.058**	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.10	--	< 0.1	< 0.1	0.1 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.043	< 0.043	< 4.5	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.1	--	< 0.1	< 0.1	0.1 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	1,000	µg/L	**1.3**	< 0.10	**0.77**	**0.59**	< 220	< 210	**1.1 J**	**0.40**	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Fluorene	1,000	µg/L	**51**	**1.3**	**15**	**23**	< 220	< 210	**20**	**20**	**11 J**	**9.4**	**24**	**25**	**3.5**	**8.5 J**	**21 J**	--	< 10	< 10	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Naphthalene	20	µg/L	**14,000**	< 0.50	**6,400**	**6,700**	**5,900**	**6,000**	**1,600 D**	**4,200**	**4,400**	**2,400**	**6,500**	**8,500**	**850**	**3,700**	**7,600 J**	--	**3,600**	**2,500**	10 U	**5.9 J**
Phenanthrene	10	µg/L	**52**	**0.83**	**23**	**22**	< 220	< 210	**34**	**18**	**12 J**	**7.3**	**21**	**24**	**1.2 J**	**6.7 J**	**17 J**	--	< 10	< 10	10 U	**1.2 J**
Pyrene	1,000	µg/L	**1.3**	< 0.050	**0.75**	**0.57**	< 220	< 210	**1.1 J**	**0.47**	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	<10	--	< 10	< 10	10 U	10 U
Inorganic Compounds																						
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	--
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	--	< 0.05	< 0.05	0.05 U	--
Barium	2	mg/L	**0.927**	**0.658**	**0.846**	**0.912**	**0.90**	**0.96**	**0.87**	**0.89**	**0.85**	**0.79**	**0.95**	**0.82**	**0.62**	**0.85**	**0.815**	--	**0.626**	**0.573**	**0.155**	--
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00033 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	--
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0017 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0033 JB**	< 0.020	< 0.020	< 0.020	**0.016 J**	< 0.020	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Cyanide	0.2	mg/L	**0.014**	< 0.010	**0.016**	< 0.010	**0.015**	**0.021**	**0.017**	**0.034**	**0.010**	**0.011**	< 0.010	< 0.010	< 0.010	**0.0094 J**	< 0.010	--	< 0.002	< 0.002	0.01 U	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	--
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0024 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	--	< 0.02	< 0.02	0.02 U	--
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	--
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1	0.001 U	--
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0024 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.011 J**	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	**0.012 J**	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	--

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-305								
		Sample Date	1/21/2005	7/15/2004	1/23/2004	7/17/2003	1/15/2003	7/10/2002	1/21/2002	7/16/2001	1/24/2001
		Unit	Pre-Extraction								
Volatile Organic Compounds											
Acetone	4,000	µg/L	120 U	120 U	120 U	25 U	120 U	120 U	120 U	120 U	25 U
Benzene	5	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	**0.59 J**	5.0 U	**0.13 J**
Carbon Disulfide	4,000	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	1.0 U
Ethylbenzene	700	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.24 J**
Methylene Chloride	5	µg/L	25 U	25 U	25 U	5.0 U	25 UJ	25 U	25 U	25 U	5.0 U
Toluene	1,000	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Trichloroethylene	5	µg/L	**39**	**34**	**36**	**44**	**32**	**3**	**32**	**36**	**34**
Xylenes, total	2,000	µg/L	10 U	10 U	10 U	2.0 U	10 U	10 U	10 U	10 U	2.0 U
Semivolatile Organic Compounds											
2-Methylnaphthalene	*	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	0.1	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds											
Aluminum (fume or dust)	*	mg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	**0.24**	0.2 U	**0.045 B**	**0.051 B**
Antimony	0.01	mg/L	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.098**	**0.11**	**0.1**	**0.1**	**0.10**	**0.1**	**0.11**	**0.099**	**0.099**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**24**	**23**	**24**	**22**	**23**	**24**	**24**	**23**	**23**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	**0.0050 B**	**0.0066 B**	**0.004 B**	**0.0042 B**	**0.0034 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.0011 U	0.02 U	**0.0013 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	**0.04**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	0.05 U	0.05 U	0.05 U	0.04 U	**0.031 B**	**0.34**	**0.048 B**	**0.062**	**0.034 B**
Lead	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.002 B**	0.005 U	0.005 U
Magnesium	*	mg/L	**13**	**12**	**12**	**12**	**12**	**12**	**13**	**12**	**12**
Manganese	*	mg/L	**0.66**	**0.61**	**0.66**	**0.61**	**0.66**	**0.68**	**0.72**	**0.82**	**0.68**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.6**	**2.7**	**2.4**	**2.8**	**2.4**	**2.5**	**2.5**	**2.4**	**2.4**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**53**	**56**	**50**	**53**	**54**	**51**	**57**	**55**	**55**
Thallium	0.002	mg/L	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.003 B**	**0.0025 B**	**0.0029 B**	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	**0.02**	0.020 U	0.02 U	**0.0067 B**	0.02 U	**0.012 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
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Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306BR																
		Sample Date	1/14/2015	7/15/2014	1/8/2014	7/9/2013	1/9/2013	7/25/2012	1/17/2012	7/5/2011	1/20/2011	7/20/2010	1/7/2010	7/22/2009	1/19/2009	7/16/2008	1/8/2008	7/10/2007	2/24/2007	02/07 DUP
		Unit	During Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 50	< 25	< 25	< 1000	< 1000	< 1000	< 1000	< 100	< 50	< 50	< 50 R	< 50
Benzene	5	µg/L	< 5.0	**300**	**500**	< 5.0	< 5.0	**68**	**720**	**390**	**480**	**730**	**1,000**	**1,500**	**1,400**	**810**	< 5.0	**3,200**	**7,300**	**7,300**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 3.0 *	< 3.0	< 50	< 50	< 50	< 50	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**4.6 J**	**1.1 J**	**1.3 J**	**2.8 J**	< 50	< 50	< 50	**1.6 J**	< 5.0	**5.5**	**260**	**270**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 50	< 50	< 50	< 50	< 5.0	< 5.0	< 5	< 5 UJ	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 3.3	< 1.7	< 1.6	< 50	< 50	< 50	< 50	**0.5 J**	< 5.0	< 5	**5.3**	**5.2**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.65	< 0.65	< 50	< 50	< 50	< 50	< 5.0	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**5.6 J**	**3.0 J**	**7.9 J**	**17 J**	< 50	< 50	17 J	**11**	< 5.0	**66**	**210**	**200**
Semivolatile Organic Compounds																				
Acenaphthene	2,000	µg/L	**5.3**	**11**	< 0.50	< 0.50	**3.2**	**5.2**	**5.1**	**11**	**9.3**	**29**	**16**	**21**	**9.1 J***	**13**	< 10	**27**	**37**	**37**
Acenaphthylene	10	µg/L	< 1	< 1.0	**14**	< 1.0	<0.20	< 3.8	< 0.10	**0.17 J**	< 0.10	**38**	**0.21**	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	**0.062**	**0.14**	**0.16**	< 0.050	<0.20	< 3.8	< 0.10	**0.22 J**	**0.14 J**	**1.1 J**	**0.27**	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.10	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.056	< 0.057	< 0.046	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.10	< 0.1	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 3.8	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**0.59**	**1.4**	**1.7**	< 0.10	**0.39**	< 3.8	**0.59**	**2**	**1.4**	**9.4**	**2.5**	**2.2**	< 20 *	1.7 J	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	**210**	**320**	< 0.50	**0.21**	**86**	**110**	**190**	**390**	**2,400**	**340**	**400**	**300**	**400**	< 10	**760**	**750 J**	**1,100**
Phenanthrene	10	µg/L	< 0.05	**0.49**	**1.1**	< 0.050	<0.20	< 3.8	**0.5**	**1.2**	**0.86 ***	**7.3**	**1.9**	**2.4**	< 20 *	1.2 J	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	**0.057**	**0.58**	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 10	< 10	< 10	< 10
Inorganic Compounds																				
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.535**	**0.46**	**0.474**	**0.0436**	**0.45**	**0.49**	**0.52**	**0.46**	**0.46**	**0.79**	**0.44**	**0.47**	**0.45**	**0.47**	**0.141**	**0.421**	**0.355**	**0.353**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00028 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	**0.0257**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0015 J**	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0021 J**	**0.0027 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.011**	**0.016**	< 0.0050	**0.011**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	**0.0217**	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	<0.020	**0.02**	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-306BR (Continued)																				
			7/11/2006	1/13/2006	1/06 DUP	7/22/2005	7/05 DUP	1/20/2005	1/05 DUP	7/15/2004	7/04 DUP	1/22/2004	1/04 DUP	7/18/2003	1/17/2003	1/03 DUP	7/12/2002	4/28/2002	4/26/2002	1/22/2002	7/18/2001	7/01 DUP	1/22/2001
			Pre-Extraction																				
Volatile Organic Compounds																							
Acetone	4,000	µg/L	50 U	2,500 U	2,000 U	620 U	620 U	2,500 U	2,500 U	2,500 U	2,500 U	12,000 U	6,200 U	2,500 U	25 U	0.025 U	1,200 U	1,200 U	1,200 U	1,200 U	**1,200 R**	**120 R**	1,200 U
Benzene	5	µg/L	**7,300**	**8,900**	**7,900**	**7,700**	**7,600**	**6,800**	**7,300**	**6,700**	**7,000**	**6,500**	**6,400**	**7,400**	**4,900 D**	**4,900 D**	**4,700**	**5,800**	**5,300**	**6,200**	**7,200**	**7,500 D**	**5,400 DB**
Carbon Disulfide	4,000	µg/L	5 U	250 U	200 U	25 U	25 U	100 U	100 U	100 U	100 U	500 U	250 U	10 U	1.0 U	1.0 U	50 U	50 U	50 U	50 U	50 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	**450**	**840**	**800**	**1,100**	**1,100**	**9,900**	**1,000**	**890**	**910**	**1,100**	**1,100**	**1,200**	**880 D**	**890 D**	**1,000**	**1,100**	**980**	**1,000**	**1,600**	**1,500 D**	--
Methylene Chloride	5	µg/L	5 U	250 U	200 U	120 U	120 U	500 U	500 U	500 U	500 U	2,500 U	1,200 U	50 U	5.0 U	5.0 U	250 U	250 U	250 U	250 U	250 U	25 U	25 U
Toluene	1,000	µg/L	**5.4**	250 U	200 U	25 U	25 U	100 U	100 U	100 U	100 U	500 U	250 U	100 U	**10**	**9.9**	**42 J**	**93**	**32 J**	**26 J**	**21 J**	**26**	**14**
Trichloroethylene	5	µg/L	5 U	250 U	200 U	25 U	25 U	100 U	100 U	100 U	100 U	500 U	250 U	100 U	1.0 U	1.0 U	50 U	50 U	50 U	50 U	50 U	5.0 U	5.0 U
Xylenes, total	2,000	µg/L	**180**	500 U	400 U	**270**	**260**	**200**	**210**	**240**	**250**	1,000 U	500 U	**690**	**550 D**	**560 D**	**630**	**780**	**640**	**500**	**920**	**1,000**	**550**
Semivolatile Organic Compounds																							
2-Methylnaphthalene	*	µg/L	--	**200**	**200**	**150**	**170**	**190**	**190**	**160**	**170**	**170**	**150**	**160**	**170**	**180**	**35**	--	--	**170**	--	**190**	**160**
Acenaphthene	2,000	µg/L	**57**	**60**	**60**	**22**	**56**	100 U	100 U	**58**	**60**	**54**	**50**	**61**	**52**	**54**	**52**	--	--	**56**	--	**65**	**54**
Acenaphthylene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.78**	**0.72**	10 U	**0.91 J**	**0.95 J**	10 U	--	--	50 U	--	50 U	10 U
Anthracene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.91**	**0.87**	10 U	**0.87 J**	**0.86 J**	**0.83 J**	--	--	50 U	--	50 U	**0.54 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 UJ	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Chrysene	0.2	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 UJ	10 U
Dibenzofuran	1	µg/L	--	50 U	50 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**6.1**	**5.8**	10 U	**1.8 J**	**1.8 J**	**1.6 J**	--	--	**1.8 J**	--	**2.1 J**	**1.8 J**
Fluoranthene	1,000	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.26**	**0.24**	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Fluorene	1,000	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**9**	**8.4**	10 U	**8.3 J**	**8.8 J**	**8.2 J**	--	--	**6.2 J**	--	**8.1 J**	**6.2 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 UJ	10 U
Naphthalene	20	µg/L	**1,600**	**1,700**	**1,700**	**1,500**	**1,800**	**1,900**	**1,800**	**1,600**	**1,700**	**1,600**	**1,400**	**1,500**	**2,200 D**	**2,500 D**	10 U	**580**	**520**	**1,700 D**	**2,000 D**	**1,800 D**	--
Phenanthrene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**7**	**6.6**	10 U	**6.8 J**	**6.9 J**	**5.9 J**	--	--	**5.6 J**	--	**7.0 J**	**4.3 J**
Pyrene	1,000	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.31**	**0.3**	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Inorganic Compounds																							
Aluminum (fume or dust)	*	mg/L	--	0.2 U	0.2 U	0.2 U	**0.727**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.029 B**	--	--	**0.03 B**	0.2 U	0.2 U	**0.033 BN**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.364**	**0.352**	**0.376**	**0.284**	**0.326**	**0.34**	**0.34**	**0.33**	**0.32**	**0.31**	**0.31**	**0.3**	**0.32**	**0.32**	**0.33**	--	--	**0.26**	**0.27**	**0.28**	**0.26**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**28.3**	**31.2**	**26.2**	**30.3**	**27**	**27**	**26**	**25**	**27**	**26**	**23**	**25**	**26**	**26**	--	--	**21**	**22**	**23**	**22**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	**0.002 B**
Cobalt	*	mg/L	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0046 B**	**0.0034 B**	0.02 U	--	--	0.02 U	**0.0026 J**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.73**	**1.76**	**1.48**	**2.32**	**1.5**	**1.5**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	--	--	**1.2**	**1.1**	**1.2**	**1.1**
Lead	0.015	mg/L	0.01 U	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0015 B**	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	**16.7**	**16.3**	**13.9**	**15.7**	**15**	**14**	**14**	**14**	**14**	**14**	**13**	**14**	**14**	**14**	--	--	**11**	**12**	**12**	**12**
Manganese	*	mg/L	--	**1**	**1.03**	**0.81**	**0.937**	**0.94**	**0.94**	**0.89**	**0.89**	**0.9**	**0.88**	**0.77**	**0.86**	**0.86**	**0.88**	--	--	**0.72**	**0.74**	**0.77**	**0.71**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	--	--	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	--	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	5 U	**2.82**	**3.42**	**3.3**	**3.3**	**3.1**	**3.1**	**3.1**	**3.1**	**2.9**	**3.1**	**3.1**	**3.1**	--	--	**2.7**	**3.1**	**3.2**	**2.7**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**16.7**	**17.1**	**15.6**	**17.3**	**15**	**15**	**15**	**15**	**16**	**15**	**16**	**15**	**15**	**15**	--	--	**13**	**14**	**15**	**14**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 UWN	--	--	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	**0.0336**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.022**	**0.015 B**	0.02 U	--	--	0.02 U	0.02 U	**0.0078 J**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306TZ																		
		Sample Date	1/13/2015	1/15 DUP	7/14/2014	7/14 DUP	1/27/2014	1/14 DUP	7/9/2013	1/10/2013	1/13 DUP	7/25/2012	7/12 DUP	1/17/2012	01/12 DUP	7/11 DUP	7/6/2011	01/11 DUP	1/18/2011	7/20/2010	1/12/2010	01/10 DUP
		Unit	During Extraction																		
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	<50	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 25	< 50	< 5.0	< 5.0	< 100 U	< 5000	< 5000
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**18**	**18**	**21**	**5.1**	**5.4**	**5.5**	**5.3**	**91**	**81**	**120**	**120**	**710**	**630**	**69**	**4700**	**4800**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	**0.89 J**	< 3.0	< 6.0	< 0.60	< 0.60	< 5.0 U	<250	<250
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.3 J**	**1.8 J**	**2.0 J**	**2.6 J**	**2.9 J**	**2.3 J**	**1.1 J**	<250	<250
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 5.0	< 10	< 1.0	< 1.0	< 5.0 U	<250	<250
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 3.3	**0.77 J**	< 1.7	< 3.3	**0.67 J**	**0.63 J**	**0.63 J**	<250	<250
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.13	< 0.65	< 1.3	< 0.13	< 0.13	< 5.0 U	<250	<250
Xylenes, total	2,000	µg/L	**6.8**	**6.3**	**7**	**8.6**	**7.5**	**8.6**	**7.5**	**8.5**	**8.8**	7.8	7.3	**12 J**	**14**	**11 J**	**11 J**	**22**	**17**	**19**	<250	<250
Semivolatile Organic Compounds																						
Acenaphthene	2,000	µg/L	**18**	**21**	**16**	**19**	**18**	**19**	**17**	**12**	**13**	**6.3**	**7.6**	**13**	**15**	**21**	**19**	**24**	**24**	**23**	<94	30
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	**0.21**	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	<0.19	<0.19	**0.34**
Anthracene	10	µg/L	**0.25**	**0.25**	**0.3**	**0.35**	**0.37**	**0.39**	**0.27**	**0.2**	**0.24**	< 3.8	< 3.8	**0.24**	**0.30**	< 0.95	< 1.0	< 0.96	< 0.96	**0.36**	**0.48**	**0.43**
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	**0.19**	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.045	< 0.043	< 0.43	< 0.46	< 0.43	< 0.43	< 0.19	< 0.19	<0.20
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Fluoranthene	1,000	µg/L	**0.12**	**0.13**	**0.14**	**0.16**	**0.17**	**0.18**	**0.15**	**0.25**	<0.19	< 3.8	< 3.8	**0.11 J**	**0.15 J**	< 0.95	< 1.0	< 0.96	< 0.96	**0.16 J**	**0.21**	**0.25**
Fluorene	1,000	µg/L	**2**	**2.2**	**2.1**	**2.3**	**2.5**	**2.7**	**2.1**	**1.6**	**1.7**	< 3.8	< 3.8	**1.3**	**1.6**	**3.4**	**3.0**	**3.5**	**3.2**	**2.0**	**4.3**	**3.4**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19 U	<0.20	< 0.19
Naphthalene	20	µg/L	**240**	**300**	**310**	**390**	**290**	**340**	**340**	**420**	**270**	**200**	**240**	**550 D**	**770**	**380**	**330**	**520**	**510**	**340**	**650**	**700**
Phenanthrene	10	µg/L	**0.95**	**1.1**	**1.3**	**1.5**	**1.6**	**1.8**	**1.5**	**1.4**	**1.3**	< 3.8	< 3.8	**1.5**	**1.9**	**2.3**	**2.2**	**2.5**	**2.6**	**2.0**	**3.2**	**3.1**
Pyrene	1,000	µg/L	**0.11**	**0.12**	**0.11**	**0.13**	**0.15**	**0.17**	**0.12**	**0.32**	<0.19	< 3.8	< 3.8	< 0.099	**0.11 J**	< 0.95	< 1.0	< 0.96	< 0.96	**0.16 J**	< 0.19	<0.20
Inorganic Compounds																						
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020
Barium	2	mg/L	**0.735**	**0.741**	**0.802**	**0.821**	**0.790**	**0.822**	**0.689**	**0.45**	**0.44**	**0.50**	**0.50**	**0.56**	**0.57**	**0.76**	**0.74**	**0.65**	**0.57**	**0.73**	**0.84**	**0.77**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	**0.0042 J**	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0083 J**	**0.014**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040
Selenium	0.05	mg/L	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306TZ (Continued)																				
		Sample Date	07/09 DUP	7/21/2009	1/19/2009	07/08 DUP	7/22/2008	1/9/2008	7/10/2007	07/07 DUP	2/15/2007	7/11/2006	2/8/2006	1/12/2006	01/06 DUP	7/22/2005	1/20/2005	7/15/2004	7/18/2003	1/15/2003	7/9/2002	1/15/2002	7/11/2001	1/22/2001
		Unit	During Extraction									Pre-Extraction												
Volatile Organic Compounds																								
Acetone	4,000	µg/L	< 2000	< 5000	< 5000	< 5000	< 1000	< 50	< 50	< 50	< 50	50 U	--	2,000 U	2,000 U	620 U	1,200 U	1,200 U	630 U	120 U	120 U	120 U	120 U	120 U
Benzene	5	µg/L	**3900**	**4200**	**3500**	**3500**	**3,500**	**4,100**	**5,600**	**5,700**	**6,800**	**6,600**	--	**5,700**	**5,500**	**6,200**	**4,600**	**3,200**	**1,700**	**1,100 D**	**1,000 D**	**880**	**1,700 D**	**740 DB**
Carbon Disulfide	4,000	µg/L	< 100	< 250	64 J	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	--	200 U	200 U	25 U	50 U	50 U	25 U	5.0 U	5.0 U	5.0 U	**11**	1.0 U
Ethylbenzene	700	µg/L	< 100	< 250	< 250	< 250	**9.0 J**	**9.4**	**8.5**	**7.8**	**39**	**64**	--	200 U	200 U	**700**	**760**	**410**	**300**	**300**	**290**	**170**	**450**	**170 D**
Methylene Chloride	5	µg/L	< 100	< 250	21 J	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	100 U	840 U	880 U	120 U	250 U	250 U	130 U	25 U	25 U	25 U	**25 J**	5.0 U
Toluene	1,000	µg/L	< 100	< 250	< 250	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	--	200 U	200 U	25 U	50 U	50 U	50 U	**1.5 J**	**2.6 J**	**7.7**	**8.9**	**1.3**
Trichloroethylene	5	µg/L	< 100	< 250	< 250	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	--	200 U	200 U	25 U	50 U	50 U	50 U	5.0 U	**3.5 J**	5.0 U	**3.1 J**	1.0 U
Xylenes, total	2,000	µg/L	< 100	< 250	61 J	**55**	**84**	**100**	**95**	**85**	**160**	**130**	--	400 U	400 U	**210**	**290**	**200**	**110**	**82**	**130**	**66**	**230**	**94**
Semivolatile Organic Compounds																								
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	**68**	**62**	**80**	**85**	**69**	**43**	**0.02**	**22**	**15**	**28**	**18**
Acenaphthene	2,000	µg/L	**43**	**41**	**14 J***	**25**	**19**	**27**	**32**	**30**	**32**	**35**	--	**24**	**23**	**29**	80 U	**26**	**19**	**0.011**	**9.7 J**	**7.2 J**	**13**	**9.3 J**
Acenaphthylene	10	µg/L	**0.29**	< 0.94	< 20 *	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	**0.71**	< 0.94	< 20 *	**0.56 J**	**0.49 J**	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	**1.3 J**	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.94	< 20 *	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.1	< 0.1	< 0.1	< 0.1	0.1 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	33 U	20 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	**0.23**	< 0.94	< 20 *	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	**5.2**	4.9	< 20 *	**3.3 J**	**2.3 J**	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	**0.00095 J**	**1.2 J**	**0.85 J**	**1.3 J**	**0.98 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**1100**	**830**	**340**	**650**	**560**	**680**	**780**	**860**	**780**	**850**	--	**710**	**670**	**910**	**820**	**660**	**490**	**0.26 D**	**210 D**	**140**	**330 D**	**180**
Phenanthrene	10	µg/L	**3.8**	**3.9**	< 20 *	**3.1 J**	**2.4 J**	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	**0.0014 J**	**0.95 J**	**0.72 J**	**1.3 J**	**1.0 J**
Pyrene	1,000	µg/L	**0.22**	< 0.94	< 20	< 3.8	< 3.9	<10	<10	<10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																								
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	**0.043 BN**	0.2 U	**0.036 BN**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.71**	**0.67**	**0.54**	**0.5**	**0.5**	**0.513**	**0.592**	**0.580**	**0.590**	**0.624**	--	**0.594**	**0.609**	**0.581**	**0.46**	**0.32**	**0.31**	**0.33**	**0.33**	**0.36**	**0.31**	**0.36**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	--	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**52.7**	**51.2**	**52.2**	**36**	**25**	**24**	**26**	**28**	**27**	**25**	**29**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 UJ	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.007 UJ	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 UN	**0.0012 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	**0.0062 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 UJ	0.01 UJ	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**3.55**	**3.56**	**2.37**	**1.5**	**0.99**	**1**	**1.2**	**1.2**	**1.3 N**	**1.1**	**1.3**
Lead	0.015	mg/L	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**29.4**	**29.8**	**27.9**	**20**	**13**	**15**	**14**	**15**	**15**	**14**	**16**
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**1.89**	**1.93**	**1.77**	**1.4**	**0.96**	**0.95**	**1.0**	**1.1**	**1.0**	**0.94 N**	**1.1**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	--	0.0002 UJ	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	5 U	5 U	**3.94**	**3.7**	**3**	**2.7**	**2.9**	**2.9**	**3.0**	**3.0**	**3.1**
Selenium	0.05	mg/L	< 0.020	< 0.020	--	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**24.8**	**24.9**	**26.2**	**23**	**24**	**21**	**23**	**18**	**17**	**23**	**19**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.002 U	0.0020 UWN	0.002 UJ	0.0020 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-307BR																			
			1/15/2015	1/15 DUP	7/16/2014	1/10/2014	1/14 DUP	8/13/2013	8/13 DUP	1/9/2013	1/13 DUP	7/24/2012	07/12 DUP	1/23/2012	01/12 DUP	07/11 DUP	7/7/2011	01/11 DUP	1/13/2011	7/20/2010	07/10 DUP	1/7/2010	01/10 DUP
			During Extraction																			
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 5,000	< 5,000	< 5,000	<5,000	< 5,000	< 50	< 50	< 10,000	< 10,000	< 20,000	< 20,000	< 1,000	< 1,000	< 1000	< 1000	< 500	< 500	< 10000	< 10000	< 10000	< 10000
Benzene	5	µg/L	**12,000**	**12,000**	**15,000**	**13,000**	**13,000**	**15,000**	**15,000**	**11,000**	**13,000**	**12,000**	**12,000**	**12,000**	**12,000**	**13,000**	**13,000**	**13,000**	**13,000**	**10000**	**11000**	**10000**	**11000**
Carbon Disulfide	4,000	µg/L	< 500	< 500	< 500	<500	< 500	< 5.0	< 5.0	<500	<500	< 1,000	< 1,000	< 120	< 120	< 120	< 120	< 60	< 60	< 500	< 500	< 500	< 500
Ethylbenzene	700	µg/L	**2,000**	**2,100**	**2,400**	**2,400**	**2,300**	**2,300**	**2,400**	**1,300**	**1,500**	**2,000**	**2,100**	**1,900**	**1,900**	**1,900**	**1,900**	**2,200**	**2,200**	**2200**	**2300**	**2000**	**2000**
Methylene Chloride	5	µg/L	< 500	< 500	< 500	<500	< 500	< 5.0	< 5.0	<500	<500	< 1,000	< 1,000	< 200	< 200	< 200	< 200	< 100	< 100	< 500	< 500	< 500	< 500
Toluene	1,000	µg/L	< 500	< 500	< 500	<500	< 500	**5.8**	**5.6**	<500	<500	< 1,000	< 1,000	**120 J**	**110 J**	**110 J**	**110 J**	**51 J**	**52 J**	**150 J**	**140 J**	<500	<500
Trichloroethylene	5	µg/L	< 500	< 500	< 500	<500	< 500	< 5.0	< 5.0	<500	<500	< 1,000	< 1,000	< 26	< 26	< 26	< 26	< 13	< 13	< 500	< 500	< 500	< 500
Xylenes, total	2,000	µg/L	**720**	**770**	**1,000**	**1,200**	**1,200**	**1,000**	**1,000**	**540**	**600**	**1,100**	**1,200**	**1,300**	**1,300**	**1,300**	**1,300**	**1,800**	**1,800**	**1800**	**1800**	**1500**	**1500**
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**220**	**220**	**240**	**270**	**250**	**180**	**160**	**200**	<190	**260**	**190**	**250**	**230**	**280**	**240**	**140**	**150**	**150**	**160**	**160**	**210**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	**3**	**2.6**	**2.6**	**1.2**	**1.6**	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	**6.2 J**	< 0.96	**2.4**	< 19	< 19	< 94	< 94
Anthracene	10	µg/L	**7.2**	**6.6**	**7.7**	**8.1**	**7.7**	**6.6**	**5.2**	< 190	< 190	< 190	< 190	< 11	< 11	**9.4 J**	**8.5 J**	**6.1**	**8.1**	< 19	**5.2**	< 94	< 94
Benz(a)anthracene	0.1	µg/L	**0.20**	**0.15**	**0.19**	**0.18**	**0.18**	**0.15**	**0.11**	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	**2.1**	< 19	< 19	< 94	< 94
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Chrysene	0.2	µg/L	**0.13**	**0.11**	**0.15**	**0.13**	**0.12**	**0.11**	**0.088**	< 190	< 190	< 190	< 190	< 4.9	< 4.7	< 2.2	< 2.2	**0.75 J**	**1.6 J**	< 19	< 19	< 94	< 94
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Fluoranthene	1,000	µg/L	**3.5**	**3.1**	**3.5**	**3.6**	**3.5**	**3.3**	**2.6**	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	**5.5**	**9.6**	< 19	**2.1**	< 94	< 94
Fluorene	1,000	µg/L	**48**	**46**	**52**	**55**	**54**	**37**	**33**	< 190	< 190	< 190	< 190	**57**	**53**	**80**	**68**	**36**	**44**	**32**	**32**	< 94	< 94
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Naphthalene	20	µg/L	**6,700**	**8,100**	**7,700**	**9,600**	**8,400**	**6,100**	**5,000**	**4,100**	**3,800**	**7,500**	**6,400**	**10,000 D**	**8,700 D**	**6,400**	**5,800**	**6,300**	**5,900**	**5900**	**8000**	**5200**	**6800**
Phenanthrene	10	µg/L	**46**	**44**	**55**	**57**	**53**	**37**	**32**	< 190	< 190	< 190	< 190	**57**	**52**	**56**	< 48	**40**	**52**	**31**	**31**	< 94	< 94
Pyrene	1,000	µg/L	**4.1**	**3.6**	**3.6**	**3.7**	**3.6**	**3.3**	**2.8**	< 190	< 190	< 190	< 190	< 11	< 11	**5.5 J**	< 4.8	**8.1**	**14**	< 19	< 19	< 94	< 94
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	**0.0057 J**	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020
Barium	2	mg/L	**0.804**	**0.826**	**0.862**	**0.893**	**0.888**	**0.905**	**0.954**	**0.87**	**0.80**	**0.89**	**0.87**	**0.92**	**0.96**	**0.90**	**0.88**	**0.96**	**0.96**	**0.85**	**0.84**	**0.85**	**0.88**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00029 J**	**0.00029 J**	< 0.00020	**0.00020 J**	**0.00087 J**	**0.00098 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	**0.012**	**0.019**	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	**0.0052 J**	**0.0043 J**	**0.0086 J**	**0.0068 J**	**0.020**	**0.047**	< 0.020	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	**0.011**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	--	< 0.010	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.0040	**0.0071 J**	**0.001 J**	< 0.0040	0.0048 J	**0.0048 J**	<0.010	<0.010	<0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	**0.0247**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.064**	**0.061**	< 0.040	< 0.040	**0.014 J**	**0.010 J**	**0.12**	**0.11**	**0.022 J**	**0.035 J**	**0.0066 J**	<0.040	<0.040	<0.040
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	**0.0024 J**	**0.0030 J**	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0746**	**0.0802**	**0.084**	**0.0897**	**0.0906**	**0.0264**	**0.117**	**0.11**	**0.11**	**0.050**	**0.057**	**0.13**	**0.079**	**0.091**	**0.083**	**4.1**	**4.6**	<0.020	<0.020	<0.020	<0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-307BR (Continued)																						
			07/09 DUP	7/23/2009	1/16/2009	07/08 DUP	7/15/2008	1/8/2008	01/08 DUP	7/9/2007	07/07 DUP	2/13/2007	10/3/2006	1/19/2006	12/7/2005	8/4/2005	7/16/2004	1/24/2004	7/18/2003	1/21/2003	7/15/2002	4/30/2002	4/26/2002	1/22/2002	7/18/2001	1/23/2001
			During Extraction										Pre-Extraction													
Volatile Organic Compounds																										
Acetone	4,000	µg/L	< 10000	< 10000	< 10000	< 500	< 500	< 50	< 50	<5,000 UJ	<5,000	< 50	50 U	1,700 U	--	25 U	1,200 U	1,200 U	250 U	250 U	2,500 U	2,500 U	1,200 U	1,200 U	**1,200 R**	1,200 U
Benzene	5	µg/L	**11000**	**11000**	**17000**	**9200**	**9800**	**11,000**	**13,000**	**10,000**	**13,000**	**9,800**	**3,800**	**5,700**	--	**380**	**3,500**	**6,700**	**4,600**	**7,900**	**10,000**	**12,000**	**11,000 D**	**11,000 D**	**6,800**	**5,100 B**
Carbon Disulfide	4,000	µg/L	< 500	< 500	< 500	< 25	< 25	< 5.0	< 5.0	< 5	< 5	< 5	5 U	170 U	--	1.0 U	50 U	50 U	10 U	100 U	100 U	100 U	50 U	50 U	50 U	50 U
Ethylbenzene	700	µg/L	**2000**	**1900**	< 500	**1600**	**1800**	**2,500**	**2,600**	**2,600**	**2,500**	**2,500**	**580**	**1,200**	--	**61**	**660**	**1,500**	**860**	**1,800**	**2,300**	**2,600**	**3,200**	**2,600**	**1,500**	**1,200**
Methylene Chloride	5	µg/L	< 500	< 500	**3000**	< 25	< 25	< 5.0	< 5.0	< 5	< 5	< 5	5 U	170 U	--	5.0 U	250 U	250 U	50 U	500 U	500 U	500 U	250 U	250 U	250 U	250 U
Toluene	1,000	µg/L	< 500	< 500	**1400**	**41**	**50**	**540**	**680**	**960**	**970**	**1,400**	**29**	170 U	--	**3.2**	50 U	50 U	**15**	**77 J**	**210**	**280**	**340**	**100**	**57**	**69**
Trichloroethylene	5	µg/L	< 500	< 500	< 500	< 25	**3.4 J**	< 5.0	< 5.0	< 5	< 5	< 5	5 U	170 U	--	1.0 U	50 U	50 U	10 U	**1,200**	100 U	100 U	50 U	50 U	50 U	50 U
Xylenes, total	2,000	µg/L	**1500**	**1500**	**2500**	**1000**	**1100**	**1,700**	**1,800**	**1,700**	**1,700**	**1,900**	**340**	**990**	--	**35**	**390**	**1,200**	**560**	**1,400**	**1,700**	**2,300**	**2,800**	**2,200**	**910**	**1,100**
Semivolatile Organic Compounds																										
2-Methylnaphthalene	*	µg/L	--	--	--	**--**	**--**	**--**	**--**	--	--	**--**	--	**550**	--	**12**	**100**	**260**	**170**	**400**	**38**	--	--	**820**	**360**	**320**
Acenaphthene	2,000	µg/L	**20**	**17**	**84**	**150**	**150**	**180 J**	**280 J**	**230**	**210**	**160**	**31**	**190**	--	**6.2**	**41**	**94**	**74**	**130**	**9.0 J**	--	--	**230**	**120**	**120**
Acenaphthylene	10	µg/L	< 3.8	< 3.8	**6.2 J**	**2.1 J**	**2.1 J**	< 10	< 10	< 10	< 10	**20**	10 U	**4.6**	--	1.0 U	40 U	**0.88**	10 U	50 U	**3.7 J**	--	--	100 U	50 U	**2.4 J**
Anthracene	10	µg/L	**3.8**	< 3.8	< 39	**6.6**	**5.5**	< 10	< 10	< 10	< 10	< 10	10 U	**5.4**	--	1.0 U	40 U	**3.3**	10 U	**2.6 J**	10 U	--	--	**4.3 J**	**2.2 J**	**3.0 J**
Benz(a)anthracene	0.1	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	**0.10**	**0.13**	**0.15**	**0.14**	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Chrysene	0.2	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	**0.080**	< 0.050	**0.080**	**0.080**	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.10	< 0.10	**0.15 J**	< 0.1 UJ	< 0.1	0.1 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	**--**	--	--	--	20 U	--	1.0 U	40 U	**4.2**	10 U	**6.4 J**	10 U	--	--	**11 J**	**5.6 J**	**6.5 J**
Fluoranthene	1,000	µg/L	< 3.8	< 3.8	< 39	**2.5 J**	**2.6 J**	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	**1.2**	10 U	50 U	10 U	--	--	100 U	50 U	**1.8 J**
Fluorene	1,000	µg/L	**3.8**	< 3.8	19 J	**33**	**32**	**38**	**38**	**33**	**37**	**36**	10 U	**37**	--	1.0 U	40 U	**13**	**14**	**26 J**	10 U	--	--	**41 J**	**20 J**	**24**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.05	< 0.050	**0.11 J**	< 0.05 UJ	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Naphthalene	20	µg/L	**590**	**420**	**2600 B**	**3400**	**3700**	**5,500 J**	**7,800 J**	**7,200**	**7,300**	**6,000**	**570**	**4,300**	--	**160**	**1,200**	**2,700**	**3,100**	**3,900 D**	**560 D**	**4,500**	**16,000 D**	**6,000 D**	**4,000 D**	**2,900 D**
Phenanthrene	10	µg/L	< 3.8	< 3.8	**23 J**	**33**	**31**	**37**	**37**	**35**	**39**	**34**	10 U	**35**	--	1.0 U	40 U	**19**	**14**	**25 J**	10 U	--	--	**44 J**	**20 J**	**26**
Pyrene	1,000	µg/L	< 3.8	< 3.8	< 39	3.4 J	3.3 J	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	**1.2**	10 U	50 U	10 U	--	--	100 U	50 U	**1.9 J**
Inorganic Compounds																										
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	**0.484**	**0.76**	**0.43**	**0.6**	**0.68**	**0.93**	--	--	**0.98**	**0.38**	**0.38 N**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.01 U	--	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500	< 0.05	< 0.05	< 0.05	0.05 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.89**	**0.88**	**0.86**	**0.82**	**0.8**	**0.735**	**0.838**	**0.767**	**0.767**	**0.782**	**0.971**	**0.851**	--	**0.844**	**1.7**	**1.5**	**1.8**	**1.4**	**1.1**	--	--	**0.98**	**1.6**	**1.0**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	**0.00038 J**	**0.00031 J**	**0.00031 J**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.005 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	0.002 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**49.2**	**57**	**60.7**	**96**	**87**	**82**	**75**	**58**	--	--	**49**	**83**	**54**
Chromium	0.1	mg/L	< 0.010	< 0.010	0.0032 J	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.0161**	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0072 B**	**0.0077 B**	--	--	**0.0073 B**	**0.0065 J**	**0.0036 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.007 U	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0028 B**	**0.0034 B**	--	--	**0.0032 B**	**0.0026 J**	**0.0028 B**
Copper	1.3	mg/L	< 0.020	< 0.020	0.0048 J	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.024**	0.025 U	--	0.02 U	0.02 U	0.02 U	0.02 U	**0.0076 B**	**0.0082 B**	--	--	**0.01 B**	**0.0034 J**	**0.0063 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	< 0.010	< 0.002	0.01 U	0.01 U	--	**0.0121**	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.013**	0.01 U	0.01 U
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**1.1**	**1.3**	**2.58**	**4.1**	**2.7**	**4.4**	**3.7**	**3.6 N**	--	--	**3.8**	**3.2**	**2.3**
Lead	0.015	mg/L	**0.024**	**0.22**	**0.0069**	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.0139**	0.003 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**24.9**	--	**25.4**	**51**	**44**	**51**	**40**	**31**	--	--	**27**	**45**	**29**
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**1.33**	**1.2**	**1.63**	**2.6**	**2.1**	**2.2**	**1.8**	**1.6**	--	--	**1.3**	**2.0**	**1.3**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	**0.000086 B**	0.0002 U	--	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.16**	**1.9**	**0.025 J**	**0.0056 J**	**0.0055 J**	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	**0.0067 B**	**0.0053 B**	--	--	**0.0049 B**	**0.0048 J**	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	5 U	--	**7.58**	**5.1**	**4.4**	**5.4**	**4.2**	**3.8**	--	--	**3.5**	**4.9**	**3.6**
Selenium	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	**0.0039 J**	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	**0.0049 B**	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**24.7**	--	**29.9**	**36**	**30**	**35**	**28**	**23**	--	--	**20**	**28**	**22**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1.00	< 1	0.001 U	0.001 U	--	0.001 U	0.002 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	--	--	0.002 U	0.004 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.0154**	0.007 U	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0027 B**	**0.0044 B**	--	--	**0.004 B**	0.01 U	0.01 U
Zinc	2	mg/L	**1.4**	**0.75**	**0.82**	**0.043**	**0.041**	**0.253 J**	**0.0934 J**	**0.0239**	**0.0229**	**0.0374**	**0.185**	0.02 U	--	0.02 U	0.02 U	0.02 U	**0.03**	**0.029**	**0.0086 B**	--	--	**0.0085 B**	0.02 U	**0.0063 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-308BR																			
		Sample Date	1/29/2015	1/15 DUP	7/16/2014	7/14 DUP	1/10/2014	1/14 DUP	7/11/2013	1/9/2013	1/13 DUP	7/25/2012	7/12 DUP	1/20/2012	01/12 DUP	7/7/2011	7/11 DUP	1/11 DUP	1/13/2011	7/20 DUP	7/20/2010	1/7/2010	1/10 DUP
		Unit	During Extraction																			
Volatile Organic Compounds																							
Acetone	4,000	µg/L	< 2,500	< 2,500	< 2,500	< 2,500	**100**	**86**	< 50	< 5,000	<5.000	< 5,000	< 10,000	< 250	< 250	< 250	< 250	< 500	< 250	< 5000	< 5000	< 5000	< 5000
Benzene	5	µg/L	**6,600**	**6,100**	**6,400**	**6,400**	**4,500**	**4,500**	**5,700**	**5,100**	**4,100**	**5,500**	**5,600**	**5,100**	**5,300**	**5,800**	**5,400**	**7,000**	**5,500**	**5,200**	**5,400**	**3,800**	**4,100**
Carbon Disulfide	4,000	µg/L	< 250	< 250	< 250	< 250	< 5.0	<5.0	< 5.0	< 250	<250	< 250	< 500	< 30	< 30	< 30	< 30	< 60	< 30	< 250	< 250	< 250	< 250
Ethylbenzene	700	µg/L	**810**	**720**	**570**	**570**	**630**	**620**	**650**	**550**	**490**	**700**	**700**	**660**	**690**	**710**	**660**	**1,100**	**1,000**	**1,100**	**1,200**	**680**	**770**
Methylene Chloride	5	µg/L	< 250	< 250	< 250	< 250	< 5.0	<5.0	< 5.0	< 250	<250	< 250	< 500	< 50	< 50	< 50	< 50	< 100	< 50	< 250	< 250	< 250	< 250
Toluene	1,000	µg/L	**2,100**	**1,900**	**940**	**940**	**810**	**810**	**1,100**	**530**	**460**	**760**	**750**	**810**	**830**	**740**	**720**	**950**	**800**	**870**	**870**	**640**	**690**
Trichloroethylene	5	µg/L	< 250	< 250	< 250	< 250	< 5.0	<5.0	< 5.0	< 250	<250	< 250	< 500	**7.9 J**	< 6.5	< 6.5	< 6.5	< 13	< 6.5	< 250	< 250	< 250	< 250
Xylenes, total	2,000	µg/L	**880**	**740**	**590**	**590**	**680**	**660**	**840**	**700**	**620**	**710**	**700**	**710**	**710**	**600**	**550**	**920**	**950**	**820**	**870**	**670**	**740**
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**46**	**46**	**170**	**180**	**140**	**160**	**90**	**240**	**270**	**190**	**190**	**180**	**140**	**190**	**150**	**91**	**41**	**88**	**84**	**130**	**360**
Acenaphthylene	10	µg/L	**66**	**63**	< 100	**69**	**84**	**72**	**82**	**250**	<200	< 190	< 190	**79**	**63**	**150**	**130**	**69**	**21**	**36**	**37**	**340**	**700**
Anthracene	10	µg/L	**7.0**	**7.5**	**36**	**24**	**35**	**21**	**26**	< 190	<200	< 190	< 190	**32**	**31**	**49**	**37**	**28**	**17 J**	< 19	**12**	**140**	**440**
Benz(a)anthracene	0.1	µg/L	**9.6**	**9.9**	**28**	**18**	**21**	**10**	**17**	< 190	<200	< 190	< 190	**22**	**27**	**58**	**30**	**25**	**12 J**	< 19	**8.8**	**130**	**670**
Benzo(a)pyrene	0.2	µg/L	**11**	**11**	**22**	**15**	**17**	**7.1**	**14**	< 190	<200	< 190	< 190	**19**	**19**	**52**	**24**	**24**	< 10	< 19	**7.1**	**120**	**620**
Benzo(b)fluoranthene	0.2	µg/L	**10**	**10**	**22**	**14**	**12**	**5.3**	**13**	< 190	<200	< 190	< 190	**23**	**25**	**22**	< 2.2	**12 J**	< 10	< 19	**3.0**	<95	**280**
Benzo(g,h,i)perylene	10	µg/L	**5.9**	**6.2**	**11**	**6.4**	**6.2**	**2.7**	**3.9**	< 190	<200	< 190	< 190	**7.3**	**8.4 J**	**17**	**8.2**	< 9.7	< 10	< 19	**2.6**	<95	**250**
Benzo(k)fluoranthene	10	µg/L	**3.3**	**3.2**	**6.7**	**4.4**	**4.1**	**1.9**	**4.5**	< 190	<200	< 190	< 190	< 1.1	< 5.7	**29**	**22**	**13 J**	< 10	< 19	**4.7**	< 95	**330**
Chrysene	0.2	µg/L	**7.8**	**8.3**	**26**	**17**	**20**	**7.6**	**15**	< 190	<200	< 190	< 190	**20**	**22**	**46**	**24**	**23**	**12 J**	< 19	**7.9**	**130**	**550**
Dibenzo(a,h)anthracene	0.3	µg/L	**1.1**	**1.2**	**2.4**	**1.4**	**1.4**	**0.6**	**1.0**	< 190	<200	< 190	< 190	< 1.1	< 5.7	< 5.0	**3.0 J**	< 9.7	< 10	< 19	< 1.9	<95	<98
Fluoranthene	1,000	µg/L	**12**	**12**	**58**	**35**	**44**	**23**	**38**	**270**	**290**	< 190	< 190	**49**	**49**	**82**	**53**	**43**	**22**	< 19	**16**	**220**	**980**
Fluorene	1,000	µg/L	**22**	**21**	**74**	**64**	**64**	**56**	**60**	**260**	**210**	< 190	< 190	**83**	**62**	**180**	**140**	**66**	**42**	**28**	**31**	**220**	**450**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**4.8**	**4.9**	**8.9**	**5.2**	**5.2**	**2.3**	**3.7**	< 190	<200	< 190	< 190	**6.2**	**7.1 J**	**15**	**7.6**	< 9.7	< 10	< 19	**2.6**	<95	**270**
Naphthalene	20	µg/L	**3,400**	**3,200**	**5,600**	**6,100**	**5,200**	**5,100**	**3,900**	**5,200**	**4,400**	**4,400**	**4,200**	**4,400**	**4,000**	**4,600**	**4,000**	**2,900**	**1,100**	**3,700**	**2,500**	**2,400**	**4,400 B**
Phenanthrene	10	µg/L	**28**	**29**	**180**	**120**	**160**	**110**	**140**	**760**	**670**	< 190	< 190	**160**	**150**	**300**	**220**	**150**	**100**	**44**	**66**	**1,800**	**370**
Pyrene	1,000	µg/L	**17**	**19**	**71**	**43**	**57**	**29**	**44**	**400**	**430**	< 190	< 190	**62**	**60**	**150**	**85**	**69**	**29**	< 19	**27**	**1,300**	**320**
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	**0.0053 J**	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020
Barium	2	mg/L	**1.11**	**1.15**	**0.554**	**0.548**	**0.549**	**0.531**	**0.576**	**0.55**	**0.55**	**0.54**	**0.54**	**0.56**	**0.54**	**0.56**	**0.52**	**0.52**	**0.49**	**0.51**	**0.53**	**0.59**	**0.58**
Beryllium	0.004	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00020 J**	< 0.00020	**0.00022 J**	**0.00022 J**	**0.00026 J**	**0.00023 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	**0.0013 J**	**0.0014 J**	**0.0014 J**	< 0.0012	**0.0023 J**	< 0.010	< 0.010	**0.027**	**0.022**
Copper	1.3	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	**0.020**	**0.011 J**	**0.0026 J**	**0.0023 J**	< 0.0019	**0.0034 J**	< 0.010	< 0.010	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.01	< 0.001	< 0.010	< 0.010	<0.010	<0.010	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0090 J**	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.013**	**0.011**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	**0.071**	**0.06**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.02	< 0.02	**0.0203**	< 0.0200	< 0.0200	< 0.0200	**0.0390**	**0.92**	**0.93**	< 0.040	< 0.040	**0.53**	**0.97**	**0.0091 J**	**0.0086 J**	**0.035 J**	**0.030 J**	< 0.040	< 0.040	**0.18**	**0.18**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	**0.0066 J**	< 0.0064	< 0.0064	< 0.00020	< 0.00020	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0472**	**0.0508**	**0.0659**	**0.0339**	**0.121**	**0.122**	**0.0803**	**0.091**	**0.089**	**0.050**	**0.050**	**0.97**	**1.1**	**0.038**	**0.040**	**0.051**	**0.049**	**0.048**	**0.044**	**2.5**	**2.9**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-308BR (Continued)																									
			During Extraction															Pre-Extraction											
		7/09 DUP	7/23/2009	1/16/2009	7/08 DUP	7/17/2008	1/8/2008	1/08 DUP	7/9/2007	07/07 DUP	2/13/2007	2/07 DUP	10/3/2006	10/06 DUP	1/19/2006	12/7/2005	7/16/2004	1/24/2004	7/18/2003	7/03 DUP	1/21/2003	7/15/2002	4/28/2002	4/26/2002	1/22/2002	7/17/2001	1/23/2001	1/18/2001
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 10,000	< 5,000	< 5,000	< 10,000	< 500	< 50	< 50	<5,000 UJ	<5,000 UJ	< 50 R	< 50	50 R	50 UR	1,000 U	--	1,200 U	1,200 U	250 U	250 U	500 U	500 U	250 U	250 U	250 U	250 U	25 U	25 U
Benzene	5	µg/L	**6,600**	**7,000**	**8,700**	**6,300**	**6,500**	**9,600**	**7,300**	**9,000**	**8,700**	**5,300**	**5,700**	**1,000**	**810**	**2,600**	--	**3,000**	**3,000**	**2,500**	**2,600**	**3,000**	**1,900**	**2,900 D**	**2,600 D**	**1,700**	**1,300**	**0.25 JB**	**960 D**
Carbon Disulfide	4,000	µg/L	< 500	< 250	< 250	< 500	< 25	< 5.0	< 5.0	< 5	< 5	< 5	< 5	5 U	5 U	100 U	--	50 U	50 U	10 U	10 U	20 U	20 U	10 U	10 U	10 U	10 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	**1,200**	**1,300**	**1,900**	**1,700**	**1,700**	**1,600**	**1,400**	**1,600**	**1,600**	**1,300**	**1,400**	**510**	**460**	**360**	--	**390**	**350**	**360**	**350**	**390**	**270**	**420**	**400**	**200**	**160**	1.0 U	**140**
Methylene Chloride	5	µg/L	< 500	< 250	< 500	< 500	< 25	< 5.0	< 5.0	< 5	< 5	< 5 UJ	< 5	5 U	5 U	100 U	--	250 U	250 U	50 U	50 U	100 U	**11 J**	50 U	50 U	50 U	50 U	5.0 U	5.0 U
Toluene	1,000	µg/L	**700**	**750**	**1,800**	**730**	**580**	**650**	**530**	**930**	**880**	**1,000**	**1,100**	**98**	**92**	**450**	--	50 U	50 U	**34**	**37**	**110**	**110**	**340**	**220**	**9.2 J**	**20**	1.0 U	**13**
Trichloroethylene	5	µg/L	< 500	< 250	< 250	< 500	< 25	< 5.0	< 5.0	< 5	< 5	< 5	< 5	5 U	5 U	100 U	--	50 U	50 U	10 U	10 U	20 U	20 U	10 U	10 U	10 U	**5.0 J**	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	**730**	**740**	**1900**	**1300**	**1000**	**940**	**760**	**760**	**710**	**750**	**830**	**200**	**190**	200 U	--	**240**	**280**	**250**	**250**	**240**	**190**	**330**	**290**	**140**	**160**	2.0 U	**120**
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**100**	--	**63**	**74**	**54**	**54**	**61**	**170 DJ**	--	--	**46 J**	**34 J**	10 U	**23**
Acenaphthene	2,000	µg/L	**310**	**840**	**260**	**310**	**260**	**140**	**150**	**120**	**110**	**70**	**82**	**28**	**28**	10 U	--	**11**	**7.6**	**10**	**10**	**12**	**51**	--	--	**12 J**	**5.5 J**	10 U	**4.2 J**
Acenaphthylene	10	µg/L	**240**	**760**	**940**	**330**	**290**	**17**	**20**	**27**	**26**	**26**	**30**	**19**	**16**	10 U	--	10 U	**1.6**	10 U	10 U	**3.7 J**	**2.1 J**	--	--	50 U	50 U	10 U	**0.54 J**
Anthracene	10	µg/L	**160**	**620**	**350**	**190**	**170**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	**0.7 J**	--	--	50 U	50 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	**280**	**1,000**	**380**	**250**	**200**	**0.48**	**0.59**	**1.4**	**1.2**	**0.06**	**0.09**	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	**230**	**870**	**390**	**200**	**170**	**0.28**	**0.35**	**0.88**	**0.75**	< 0.05	< 0.05	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	**180**	**660**	**310**	**170**	**160**	**0.20**	**0.26**	**0.85**	**0.75**	< 0.1	< 0.1	0.1 U	0.1 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	**90**	**340**	**130**	**85**	**64**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	**140**	**480**	**270**	**52**	**46**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Chrysene	0.2	µg/L	**220**	**890**	**330**	**220**	**180**	**0.40**	**0.47**	**0.87**	**0.66**	< 0.05 UJ	**0.06**	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	**29**	**120**	**31 J**	**25**	**18**	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1	< 0.1	0.1 U	0.1 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	**1.1 J**
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	10 U	--	10 U	**0.37**	10 U	10 U	**0.56 J**	**2.7 J**	--	--	50 U	50 U	10 U	10 U
Fluoranthene	1,000	µg/L	**390**	**1,400**	**600**	**490**	**390**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	**0.38 J**	--	--	50 U	50 U	10 U	10 U
Fluorene	1,000	µg/L	**250**	**920**	**730**	**580**	**400**	**31**	**34**	**27**	**25**	**15**	**19**	10 U	10 U	10 U	--	10 U	**1.5**	10 U	10 U	**2.4 J**	**12**	--	--	50 U	50 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**86**	**320**	**140**	**90**	**61**	**0.080**	**0.10**	**0.33**	**0.31**	< 0.05	< 0.05	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Naphthalene	20	µg/L	**5,600**	**9,200**	**8,900 BD**	**8,800**	**8,400**	**4,600**	**4,700**	**5,800**	**5,300**	**2,200**	**2,600**	**1,100**	**860**	**1,100**	--	**840**	**1,200**	**680**	**730**	**850 D**	**1,900 D**	**1,600**	**1,300**	**660**	**480**	10 U	**250**
Phenanthrene	10	µg/L	**820**	**2,600**	**1,600**	**900**	**750**	**36**	**39**	**35**	**31**	**16**	**19**	10 U	10 U	10 U	--	10 U	**0.84**	10 U	10 U	10 U	**11**	--	--	50 U	50 U	10 U	10 U
Pyrene	1,000	µg/L	**610**	**2,200**	**870**	**590**	**480**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--		0.2 U	--	0.2 U	**0.89**	0.2 U	0.2 U	0.2 U	**1.6**	--	--	**1.2**	**0.7 N**	**1.5 N**	**4.8**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.01 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500	< 0.05	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	**0.0037 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.54**	**0.55**	**0.6**	**0.82**	**0.62**	**0.540**	**0.501**	**0.556**	**0.557**	**0.603**	**0.608**	**0.797**	**0.785**	**0.516**	--	**0.44**	**0.44**	**0.41**	**0.4**	**0.43**	**0.48**	--	--	**0.4**	**0.35**	**0.41**	**0.4**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	**0.00035 J**	**0.0046**	**0.0013 J**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.005 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	0.005 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**36.4**	**38**	**24**	**25**	**21**	**21**	**23**	**26**	--	--	**21**	**19**	**28**	**21**
Chromium	0.1	mg/L	< 0.010	< 0.010	0.0020 J	**0.043**	**0.017**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0112**	**0.0115**	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.018**	--	--	**0.0092 B**	**0.0019 B**	**0.0042 B**	**0.0097 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0072**	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0038 B**	**0.0061 B**	--	--	**0.0042 B**	**0.0036 B**	**0.013**	**0.0073 B**
Copper	1.3	mg/L	< 0.020	< 0.020	0.0097 J	**0.11**	**0.061**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0436**	**0.0425**	0.025 U	--	0.02 U	0.02 U	0.02 U	0.02 U	**0.0019 B**	**0.0077 B**	--	--	**0.0054 B**	**0.0023 B**	**0.014 B**	**0.041**
Cyanide	0.2	mg/L	< 0.010	**0.012**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.015**	**0.013**	< 0.002	< 0.002	0.01 U	0.01 U	0.01 U	--	**0.03**	**0.022**	0.015 U	0.015 U	**0.015**	**0.13**	**0.029**	**0.035**	**0.011**	**0.014**	0.01 U	**0.0056 B**
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.37**	**1.3**	**3.9**	**5.8**	**3.3**	**3.4**	**3.4**	**6.8 N**	--	--	**5.1**	**4.1**	**3.5**	**11**
Lead	0.015	mg/L	< 0.010	< 0.010	**0.014**	**0.043**	**0.036**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.003 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**17.1**	--	**12**	**13**	**13**	**12**	**13**	**14**	--	--	**12**	**10**	**12**	**13**
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.18**	**0.96**	**0.68**	**0.82**	**0.59**	**0.59**	**0.59**	**0.75**	--	--	**0.58**	**0.55**	**0.38**	**0.71**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 UJ	0.0002 UJ	**0.00012 B**	0.0002 U	--	--	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	**0.086**	**0.090**	**0.077**	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.014 B**	--	--	0.04 U	0.04 U	0.04 U	**0.011 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.07**	--	**3.3**	**3.3**	**2.8**	**2.8**	**3.2**	**3.9**	--	--	**3.3**	**3.1**	**3.7**	**4.9**
Selenium	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0053 B**	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**15.8**	--	**15**	**16**	**14**	**14**	**15**	**15**	--	--	**14**	**13**	**13**	**13**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	**0.00074**	< 0.0010	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	0.001 U	0.001 U	0.001 U	--	0.002 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UWN	--	--	0.002 U	0.002 UWN	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	0.0035 J	**0.077**	**0.022**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0202**	**0.0208**	0.007 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0069 B**	--	--	**0.005 B**	**0.0026 B**	**0.0037 B**	**0.018**
Zinc	2	mg/L	**0.088**	**0.099**	**0.62**	**1.4**	**1.1**	**0.118 J**	**0.790 J**	**0.124**	**0.0960**	**0.0619**	**0.0599**	**0.0513**	**0.0641**	0.02 U	--	0.02 U	0.02 U	**0.04**	**0.06**	**0.022**	**0.01 B**	--	--	**0.0079 B**	**0.0073 B**	0.02 U	**0.025**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309BR																	
		Sample Date	1/29/2015	7/17/2014	1/9/2014	7/9/2013	1/9/2013	7/23/2012	1/17/2012	7/6/2011	1/17/2011	7/14/2010	1/5/2010	7/21/2009	1/21/2009	7/17/2008	1/8/2008	8/21/2007**	7/12/2007	2/14/2007
		Unit	During Extraction																	
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	<100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	**69**	--	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.60 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.17 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	0.38 J	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Semivolatile Organic Compounds																				
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Anthracene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	--	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.048	< 0.049	< 0.043	< 0.046	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	--	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	< 0.11	< 0.11	< 0.096	**0.65**	**0.13 J**	< 0.19	< 0.19	**0.067 J**	**0.052 J**	< 10	--	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	**0.055**	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Inorganic Compounds																				
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.05	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	--	< 0.05	< 0.05
Barium	2	mg/L	**0.143**	**0.0398**	**0.245**	**0.148**	**0.20**	**0.47**	**0.20**	**0.39**	**0.46**	**0.092**	**0.069**	**0.22**	**0.22**	**0.22**	**0.221**	--	**0.230**	**0.249**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	**0.0086**	< 0.0050	**0.0113**	**0.0056**	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010
Copper	1.3	mg/L	**0.0348**	**0.0481**	**0.0105**	**0.0759**	**0.030**	< 0.0019	**0.028**	**0.0052 J**	< 0.0019	**0.0024 J**	< 0.020	< 0.020	**0.0073 J**	**0.0031 J**	< 0.0100	--	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.000092**	< 0.00020	--	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	--	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	**0.0035 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0049 J**	**0.0045 J**	< 0.0100	--	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	**0.021**	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-309BR (Continued)												
			7/12/2006	1/12/2006	7/21/2005	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/17/2003	7/11/2002	1/17/2002	1/17/2002	7/12/2001	1/23/2001
			Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	**15 J**	**25 R**	**25 R**	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.38**	**0.13 B**	**0.13 B**	**15**	**2.4 N**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0044 U	0.0036 U	0.01 U	0.01 U
Barium	2	mg/L	**0.22**	**0.381**	**0.375**	**0.38**	**0.38**	**0.38**	**0.33**	**0.39**	**0.38**	**0.39**	**0.39**	**0.53**	**0.4**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00073 U	0.00068 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**26.4**	**24.4**	**26**	**25**	**28**	**25**	**27**	**25**	**26**	**27**	**40**	**27**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0032 B**	0.01 U	0.002 U	**0.18 N**	**0.0063 B**
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0025 B**	**0.006 B**	**0.0028 B**	**0.0036 B**	**0.14**	**0.021**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.002 B**	**0.0062 B**	0.0015 U	0.0019 U	**0.21 N**	**0.027**
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.42**	**1.2**	**1.5**	**1.2**	**1.3**	**1.3**	**1.3**	**1.8**	**1.6**	**1.6**	**28**	**5.0**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	**0.003 B**	0.005 U
Magnesium	*	mg/L	< 0.0002	--	**12.1**	**9.83**	**11**	**10**	**11**	**10**	**12**	**10**	**11**	**11**	**23**
Manganese	*	mg/L	< 0.02	--	**0.355**	**0.321**	**0.36**	**0.34**	**0.35**	**0.35**	**0.32**	**0.33**	**0.37 J**	**0.37 J**	**0.78 N**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000077 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	**0.1**	0.04 U
Potassium	*	mg/L	--	5 U	**2.98**	**3.6**	**3.5**	**3.6**	**3**	**3.5**	**3.7**	**3.6 J**	**3.6 J**	**5.3**	**3.6**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**13.1**	**12.3**	**12**	**12**	**13**	**13**	**13**	**13**	**12**	**12**	**14**	**13**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UN	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.046**	**0.0072 B**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.051**	0.02 U	0.02 U	0.02 U	**0.054**	**0.0086 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309TZ																	
		Sample Date	7/21/2009	1/20/2009	07/23/2008	1/9/2008	7/12/2007	2/14/2007	7/12/2006	1/11/2006	7/21/2005	1/20/2005	7/14/2004	1/20/2004	7/16/2003	1/15/2003	7/10/2002	1/16/2002	7/12/2001	1/24/2001
		Unit	During Extraction						Pre-Extraction											
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**72**	**65**	**17 J**
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	**1.6**	**12**	**28**	**49**	**20**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.31 J**	5.0 U	5.0 U	**0.42 J**
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	**2.3**	1.0 U	**1.2**	**1.0**	1.0 U	**0.61 J**	**0.65 J**	**0.33 J**	**0.64 J**	**3.4**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.37 J**	**0.55 J**
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	µg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**0.4 J**
Benzo(a)pyrene	0.2	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.20	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.20	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	**--**	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.20	**0.036 J**	**0.10 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	--	--	**--**	--	--	--	--	**0.306**	**0.358**	**0.48**	**0.39**	**0.51**	**0.7**	**0.85**	**2.9**	**29**	**4.7**	**22**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0039 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.48**	**0.38**	**0.53**	**0.511**	**0.460**	**0.406**	**0.336**	**0.248**	**0.245**	**0.22**	**0.17**	**0.17**	**0.12**	**0.15**	**0.069**	**0.29**	**0.068**	**0.25**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	**0.0015 B**	0.004 U	**0.0013 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.00092 B**	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**23.5**	**37.2**	**26**	**25**	**31**	**24**	**46**	**41**	**71**	**82**	**120**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	**0.034**	**0.0023 B**	**0.022**
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0016 B**	**0.043**	**0.0027 B**	**0.029**
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	**0.0027 B**	**0.082**	**0.0076 B**	**0.053**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	--
Iron	*	mg/L	--	--	--	--	--	--	--	**1.14**	0.1 U	**0.08**	**0.29**	**0.29**	**1.2**	**0.23**	**2**	**56**	**2.7**	**41**
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.015**	0.005 U	**0.01**
Magnesium	*	mg/L	--	--	--	--	--	--	--	**5.43**	**2.5**	**4.2**	**2.1**	**2.4**	**1.7**	**0.17 B**	**0.47 B**	**12**	**0.52**	**8.9**
Manganese	*	mg/L	--	--	--	--	--	--	--	**0.126**	0.01 U	**0.089**	**0.01**	**0.015**	0.04 U	**0.0037 B**	**0.027**	**0.59**	**0.027**	**0.47**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	**0.035 B**	0.04 U	**0.024 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	**5.58**	**5.66**	**5.6**	**5.8**	**5.8**	**6.2**	**7.0**	**5.6**	**13**	**9.1**	**15**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0046 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**30.7**	**31.9**	**31**	**26**	**25**	**27**	**23**	**12**	**15**	**16**	**21**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0051 B**	**0.095**	**0.011**	**0.068**
Zinc	2	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	**0.027**	0.02 U	0.02 U	0.02 U	**0.02**	0.020 U	**0.011 B**	**0.13**	**0.0077 B**	**0.11**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-310BR															
		Sample Date	1/12/2015	7/15/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/17/2012	7/5/2011	1/18/2011	7/15/2010	1/7/2010	7/27/2009	1/13/2009	7/22/2008	1/8/2008	7/12/2007	2/15/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**1.1**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.20**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.35**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.54**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.37**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.44**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.047	< 0.056	< 0.043	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.11 J**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.4**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**7.6**	< 0.50	< 0.50	< 0.50	< 0.22	**0.25**	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.142**	**0.192**	**0.261**	**0.209**	**0.23**	**0.20**	**0.21**	**0.21**	**0.22**	**0.53**	**0.27**	**0.19**	**0.13**	**0.21**	**0.228**	**0.221**	**0.243**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0026 J**	< 0.0019	**0.0020 J**	< 0.020	< 0.020	< 0.020	**0.033**	**0.0068 J**	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.016**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0030 J**	**0.0045 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.027 J**	**0.0043 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	**0.010 J**	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-310BR (Continued)												
		Sample Date	7/11/2006	1/13/2006	7/20/2005	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/21/2003	7/16/2002	7/02 DUP	1/21/2002	1/18/2001	7/17/2001
		Unit	Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.0**	**2.4**	1.0 U	1.0 U	**0.23 J**
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.6**	**1.5**	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.34 J**	1.0 U	1.0 U	**0.33 J**
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.7 J**	**0.7 J**	2.0 U	2.0 U	**1.2 J**
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.58 J**	**0.78 J**	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	**0.45**	**0.48**	10 U	10 U	**0.56 J**	**0.59 J**	**0.5 J**	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**5.1 J**	**6.3 J**	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.044 B**	**0.085 B**	**8.3**	**0.11 B**	**0.095 BN**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.13**	**0.206**	**0.205**	**0.2**	**0.19**	**0.18**	**0.17**	**0.22**	**0.19**	**0.19**	**0.26**	**0.18**	**0.18**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**10.8**	**12.2**	**11**	**9.8**	**10**	**8.6**	**15**	**10**	**10**	**16**	**10**	**9.9**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	**0.0089 B**	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0016 B**	**0.002 B**	**0.0075 B**	0.01 U	0.01 U
Copper	1.3	mg/L	**0.0353**	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.012 B**	**0.0051 B**	**0.007 B**	**0.05**	**0.0014 B**	**0.0026 B**
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**5.78**	**6.25**	**5.4**	**4.9**	**5.2**	**4.4**	**5.8**	**5**	**5.1**	**18**	**5.2**	**5.1**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0019 B**	0.005 U	0.005 U
Magnesium	*	mg/L	< 0.0002	--	**6.16**	**6.69**	**5.8**	**5.3**	**5.5**	**5**	**6.4**	**5.4**	**5.5**	**9**	**5.5**
Manganese	*	mg/L	< 0.02	--	**0.798**	**0.821**	**0.77**	**0.72**	**0.73**	**0.64**	**0.81**	**0.71**	**0.72**	**1.1**	**0.7**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U
Nickel	0.1	mg/L	**0.0397**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0069 B**	**0.0063 B**	**0.006 B**	**0.017 B**	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	**2.93**	**2.8**	**2.6**	**2.6**	**1.8**	**2.9**	**2.6**	**2.6**	**3.7**	**2.7**	**2.6**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.005 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**14.3**	**16.7**	**13**	**13**	**13**	**12**	**13**	**12**	**12**	**13**	**12**	**12**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UW	0.002 UW	0.002 U	0.002 UW	0.002 UWN
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.051**	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.02**	0.02 U	0.02 U	**0.024**	**0.0077 B**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-310TZ																
		Sample Date	7/21/2009	1/14/2009	07/22/2008	1/9/2008	7/10/2007	2/15/2007	7/11/2006	1/14/2006	1/20/2005	7/20/2005	7/05 DUP	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/16/2003	7/10/2002
		Unit	During Extraction						Pre-Extraction										
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.1 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	1.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.19	**0.038 J**	**0.030 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	**0.23**	**0.24**	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.3 J**
Acenaphthylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	**0.18**	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	**0.15**	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	**0.060**	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	**0.38**	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	**0.32**	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.14 B**	0.2 U
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.02 U	0.006 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U
Barium	2	mg/L	**0.13**	**0.1**	**0.11**	**0.107**	**0.128**	**0.175**	**0.244**	**0.231**	**0.23**	**0.211**	**0.214**	**0.22**	**0.17**	**0.13**	**0.14**	**0.15**	**0.15**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.00075 B**
Calcium metal	*	mg/L	--	--	**--**	--	--	--	--	**20.1**	**22**	**20.4**	**20.8**	**21**	**24**	**25**	**34**	**21**	**17**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U
Cobalt	*	mg/L	--	--	**--**	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	**0.017**	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U
Iron	*	mg/L	--	--	**--**	--	--	--	--	**4.8**	**2.9**	**4.15**	**4.23**	**2.9**	**0.24**	**0.22**	**0.05**	**0.68**	**0.95**
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U
Magnesium	*	mg/L	--	--	**--**	--	--	--	--	**6.37**	**4.8**	**5.98**	**6.1**	**4.6**	**1.5**	**1.1**	**0.49**	**1.7**	**1.8**
Manganese	*	mg/L	--	--	**--**	--	--	--	--	**0.748**	**0.62**	**0.705**	**0.717**	**0.61**	**0.083**	**0.063**	0.04 U	**0.14**	**0.18**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U
Potassium	*	mg/L	**--**	**--**	**--**	--	--	--	--	5 U	**3.3**	**2.94**	**3.11**	**3.2**	**3.7**	**3.6**	**3.8**	**3.2**	**3.1**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0061 B**
Sodium	*	mg/L	--	--	**--**	--	--	--	--	**14.6**	**15**	**15.3**	**15.4**	**15**	**19**	**19**	**19**	**23**	**23**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U
Zinc	2	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	0.020 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-313															
		Sample Date	1/13/2015	7/17/2014	1/9/2014	7/9/2013	1/8/2013	7/25/2012	1/17/2012	7/5/2011	1/17/2011	7/14/2010	1/5/2010	7/22/2009	1/14/2009	7/21/2008	1/8/2008	7/12/2007	2/13/2007
		Unit	During Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**8.7 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	**0.35 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.044	< 0.050	< 0.045	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.20	**2.3**	**0.89**	**0.52**	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	**0.055**	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	--	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.141**	**0.197**	**0.151**	**0.145**	**0.18**	**0.14**	**0.12**	**0.14**	**0.10**	**0.23**	**0.12**	**0.14**	**0.14**	**0.38**	**0.202**	**0.203**	**0.212**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.00055 J**	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0027 J**	**0.0027 J**	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0038 J**	**0.0023 J**	< 0.020	< 0.020	**0.0056 J**	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.014**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	< 0.002
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	**0.0047 J**	< 0.010	< 0.010	**0.0028 J**	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	--	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0053 J**	**0.0048 J**	**0.0060 J**	**0.0030 J**	< 0.010	< 0.010	**0.0022 J**	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0564**	< 0.0200	**0.0501**	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.036**	**0.035**	**0.027**	< 0.020	**0.034**	< 0.020	< 0.0200	< 0.02	**0.0672**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-313 (Continued)											
		Sample Date	7/12/2006	1/12/2006	7/19/2005	1/19/2005	7/14/2004	1/21/2004	7/16/2003	1/20/2003	7/15/2002	1/17/2002	7/16/2001	1/19/2001
		Unit	Pre-Extraction											
Volatile Organic Compounds														
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.68 J**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	--	**0.571**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.033 B**	**0.045 B**	**0.032 B**	**0.042 B**	**0.043 B**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	**0.0054 B**	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.23**	**0.218**	**0.162**	**0.22**	**0.23**	**0.21**	**0.19**	**0.22**	**0.23**	**0.2**	**0.22**	**0.24**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**34.8**	**27**	**31**	**32**	**33**	**32**	**31**	**32**	**32**	**31**	**33**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	**0.0245**	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0021 B**	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**0.606**	**0.436**	**0.56**	**0.59**	**0.6**	**0.54**	**0.67**	**0.63 N**	**0.69**	**0.64**	**0.81 N**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	**14.1**	**10.5**	**13**	**13**	**13**	**12**	**13**	**13**	**12**	**13**	**14**
Manganese	*	mg/L	--	**0.399**	**0.288**	**0.39**	**0.4**	**0.39**	**0.38**	**0.38**	**0.39**	**0.37**	**0.39**	**0.44**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000072 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	**2.77**	**3.3**	**3.4**	**3.2**	**2.8**	**3**	**3.2**	**2.9**	**3.1**	**3.2**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0068 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**14.2**	**12.7**	**13**	**14**	**13**	**14**	**14**	**13**	**13**	**13**	**14**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.022**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 RR Reduction	Location ID / Sample Date / Unit	MW-315 During Extraction																											
			1/13/2015	1/15 DUP	7/14/2014	7/14 DUP	1/9/2014	1/14 DUP	7/11/2013	1/8/2013	1/13 DUP	7/25/2012	7/12 DUP	1/18/2012	01/12 DUP	7/7/2011	1/11 DUP	1/19/2011	7/10 DUP	7/15/2010	1/6/2010	1/10 DUP	7/29/2009	1/15/2009	7/08 DUP	7/17/2008	1/10/2008	7/12/2007	07/07 DUP	2/15/2007
Volatile Organic Compounds																														
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 100	< 100	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.29 J**	**0.29 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	**1.9 J**	**1.9 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**1.6 J**	**1.6 J**	**0.15 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	**0.95 J**	**0.90 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	**0.24 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Semivolatile Organic Compounds																														
Acenaphthene	2,000	µg/L	**0.56**	**0.65**	**1.5**	**1.5**	**1.0**	**0.96**	**1.1**	< 1.9	**1.9**	**0.73**	**0.77**	**1.5**	**1.7**	< 0.11	**1.1**	**0.99**	**1.2**	**1.1**	**1.8**	**1.6**	**2.9 ***	**1.8**	**2**	**2**	< 10	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.9	**0.56**	**0.24**	< 0.21	< 0.21	**0.52**	< 0.11	< 0.098	< 0.097	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	**0.020 J**	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 1.9	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	< 0.097	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	**0.043 J**	**0.033 J**	**0.04 J**	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.16**	< 0.050	**0.22**	**6.0**	<0.20	< 0.21	< 0.21	**0.51**	< 0.11	< 0.11	< 0.098	**0.33**	< 0.20	**0.20**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.18**	< 0.050	**0.53**	**15**	<0.20	< 0.21	< 0.21	**0.76**	< 0.11	< 0.11	< 0.098	**0.77**	< 0.20	**0.35**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**0.14**	< 0.10	**0.97**	**25**	<0.20	**0.29**	**0.25**	**1.9**	< 0.11	< 0.11	< 0.098	**1.1**	< 0.20	**0.54**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**0.15**	< 0.10	**0.66**	**16**	<0.20	< 0.21	< 0.21	**1.2**	< 0.11	< 0.11	< 0.098	**0.88**	< 0.20	**0.37**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.15**	< 0.050	**0.35**	**8.7**	<0.20	< 0.21	< 0.21	**1.7**	< 0.11	< 0.11	< 0.098	**0.91**	< 0.20	**0.44**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.15**	< 0.050	**0.47**	**15**	<0.20	< 0.21	< 0.21	**0.84**	< 0.048	**0.066 J**	< 0.044	**0.69**	< 0.20	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**0.16**	< 0.10	< 0.10	**3.8**	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	< 0.097	< 0.20	**0.11 J**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	< 0.10	**0.54**	**14**	<0.20	< 0.21	< 0.21	**0.82**	< 0.11	< 0.11	< 0.098	**0.78**	< 0.20	**0.40**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.9	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	< 0.097	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.16**	< 0.050	**0.51**	**15**	<0.20	< 0.21	< 0.21	**1.0**	< 0.11	< 0.11	< 0.098	**0.57**	< 0.20	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	**0.61**	< 0.50	**2.9**	< 1.9	<0.20	< 0.21	< 0.21	**0.41**	**2.5**	**0.62**	**0.87**	**0.98**	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.05	< 0.050	< 0.050	<0.050	< 0.050	**0.094**	< 1.9	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	**0.11 J**	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	< 0.05	< 0.050	**0.051**	**0.091**	< 0.050	**0.41**	**9.0**	<0.20	< 0.21	< 0.21	**0.69**	< 0.11	< 0.11	< 0.098	**0.66**	< 0.20	**0.39**	< 0.19	< 0.19	< 0.19	**0.024 J**	**0.027 J**	**0.028 J**	< 10	< 10	< 10	< 10
Inorganic Compounds																														
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.455**	**0.459**	**0.399**	**0.413**	**0.473**	**0.48**	**0.487**	**0.49**	**0.48**	**0.52**	**0.53**	**0.53**	**0.54**	**0.020**	**0.54**	**0.52**	**0.54**	**0.53**	**0.48**	**0.51**	**0.5**	**0.57**	**0.51**	**0.5**	**0.507**	**0.481**	**0.479**	**0.463**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00037 J**	**0.00036 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0026 JB**	**0.0032 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.000094 J**	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	<0.020	**0.024**	< 0.020	< 0.0087	< 0.0087	**0.057**	**0.0091 J**	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-315 (Continued)												
		Sample Date	7/13/2006	7/06 DUP	1/13/2006	7/20/2005	1/18/2005	7/15/2004	1/22/2004	7/18/2003	1/21/2003	7/12/2002	1/21/2002	7/16/2001	1/24/2001
		Unit	Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 R	50 R	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.11 J**	**0.19 J**
Carbon Disulfide	4,000	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U	1.0 U	1.0 U	**0.19 J**
Methylene Chloride	5	µg/L	5 U	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	5 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.5**	**2.0**	**2.3**	**1.5 J**	**2.1 J**	**3.2**	**2.8**
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	--	**7.5**	**6.7**	**5.5**	**22**	**26**	**12**	**16**	**6.5 J**	**12**	**21**	**35**
Acenaphthene	2,000	µg/L	**12**	**15**	**32**	**28**	**39**	**61**	**49**	**33**	**50**	**49**	**45**	**54**	**53**
Acenaphthylene	10	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	10 U	**0.55**	**0.61**	0.8 U	2.0 U	**1.2**	10 U	**1.0 J**	**0.86 J**	**0.76 J**	**1.3 J**	**0.97 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.1 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.1 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	0.001 U	0.2 U	0.8 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	10 U	**0.27**	**0.33**	0.8 U	2.0 U	0.2 U	10 U	**1.1 J**	**0.93 J**	**0.48 J**	**1.4 J**	**0.86 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	**1.1**	10 U	10 U	10 U	10 U	10 U	**0.81 J**
Phenanthrene	10	µg/L	10 U	10 U	**1.6**	**1.5**	**1.3**	**4.5**	**4.7**	10 U	**4.0 J**	**2.4 J**	**3.5 J**	**6.4 J**	**6.5 J**
Pyrene	1,000	µg/L	10 U	10 U	**0.36**	**0.25**	0.8 U	2.0 U	**0.5**	10 U	10 U	10 U	10 U	10 U	**0.54 J**
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.046 B**	**0.061 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.404**	**0.395**	**0.306**	**0.282**	**0.3**	**0.3**	**0.29**	**0.27**	**0.3**	**0.3**	**0.29**	**0.29**	**0.29**
Beryllium	0.004	mg/L	0.01 U	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**37.7**	**39.9**	**37**	**37**	**39**	**34**	**38**	**37**	**38**	**37**	**36**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.002 B**	0.02 U	**0.0013 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	**5.37**	**5.45**	**5.1**	**5.1**	**5.6**	**4.4**	**5.3**	**5.2**	**5.4**	**5.3**	**5.0**
Lead	0.015	mg/L	0.01 U	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	**16.2**	**16.5**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**15**
Manganese	*	mg/L	--	--	**1.13**	**1.08**	**1.1**	**1.1**	**1.1**	**1**	**1.1**	**1.1**	**1**	**1.1**	**1.0**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	5 U	**4.2**	**4.4**	**4.3**	**4.3**	**3.6**	**4.2**	**4.2**	**4.1**	**4.1**	**4.1**
Selenium	0.05	mg/L	0.02 U	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**18.8**	**20.1**	**17**	**18**	**19**	**17**	**19**	**18**	**18**	**18**	**18**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.033**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-318																			
		Sample Date	1/14/2015	7/17/2014	1/27/2014	7/11/2013	7/13 DUP	1/9/2013	7/24/2012	2/6/2012	7/5/2011	07/11 DUP	2/23/2011	7/13/2010	1/7/2010	01/09 DUP	1/14/2009	7/16/2008	1/10/2008	01/08 DUP	7/12/2007	2/14/2007	02/07 DUP
			During Extraction																			
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 500	< 5,000	< 50	**380 J**	**390 J**	< 50	**160 J**	< 100	< 4000	< 4000	< 4000	< 50	< 50	< 50	< 50R	< 50
Benzene	5	µg/L	**1,400**	**1,700**	< 5.0	**3,300**	**3,300**	**670**	**3,700**	**1,700**	**4,600**	**4,500**	**3,500**	**1,100**	**5,700 D**	**7,300**	**5,900**	**3,700**	**5,200**	**5,200**	**6,200**	**5,300**	**5,400**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	< 6.0	< 30	< 30	< 6.0	< 50	<5.0	< 200	< 200	< 200	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	< 5	< 5.0	< 5.0	**11**	**9.4**	< 25	< 250	**8.6 J**	**14 J**	**15 J**	**21 J**	**9.3 J**	**32**	**510**	**410**	**460**	**660**	**660**	**810**	**970**	**990**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	< 10	< 50	< 50	< 10	< 50	<5.0	< 200	< 200	< 200	< 5.0	< 5.0	< 5	< 5 UJ	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	**4.7 J**	**21 J**	**34 J**	**8.2 J**	**750**	<5.0	< 200	< 200	< 200	**5.2**	< 5.0	< 5	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	< 1.3	< 6.5	< 6.5	< 1.3	< 50	<5.0	< 200	< 200	< 200	< 5.0	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	**13**	**22**	< 5.0	**35**	**31**	< 25	< 250	**13 J**	**30 J**	**35 J**	**44 J**	**10 J**	**89**	**70 J**	**55 J**	**48 J**	**110**	**91**	**100**	**110**	**100**
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**37**	**31**	**2.8**	< 50	< 50	**11**	< 210	**28**	**30**	**35**	**42**	**7.2**	**28**	**25 J**	**26**	**28**	**56**	**46**	**54**	**40**	**37**
Acenaphthylene	10	µg/L	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 210	< 9.9	< 0.10	< 0.11	**0.46**	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	**0.81**	**0.88**	**0.055**	**0.73**	**0.76**	< 2.0	< 210	< 9.9	**0.96**	**0.96**	**0.85**	< 2.0	**0.74**	< 38	< 9.4	**0.85 J**	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0 *	< 0.19	< 38	< 9.4	< 3.8	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 4.5	< 0.046	<0.047	<0.049	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 2.0	< 210	< 9.9	< 0.10	<0.11	<0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 1	**0.36**	<0.10	**0.32**	**0.34**	< 2.0	< 210	< 9.9	**0.39**	**0.44**	**0.40**	< 2.0	**0.34**	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**4.6**	**5**	**0.48**	**4.5**	**4.6**	< 2.0	< 210	< 9.9	**8.4**	**8.6**	6.7	**1.4 J**	**5.3**	< 38	**3.3 J**	**0.46 J**	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	<0.11	<0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Naphthalene	20	µg/L	**920**	**730**	**7.3**	**820**	**820**	**160**	**880**	**550**	**770**	**870**	**1,000**	**110**	**780**	**720**	**680**	**720**	**1,400**	**1,100**	**1,100**	**820**	**790**
Phenanthrene	10	µg/L	**4.5**	**4.6**	**0.36**	**4.0**	**4.1**	< 2.0	< 210	< 9.9	**6.1**	**6.3**	**5.7**	**1.5 J**	**4.5**	< 38	**3.4 J**	**4.1**	< 10	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.5	**0.38**	0.050	**0.30**	**0.33**	< 2.0	< 210	< 9.9	**0.49**	**0.54**	**0.47**	< 2.0	**0.25**	< 38	< 9.4	< 3.8	<10	<10	< 10	< 10	< 10
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.0063 J B**	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.551**	**0.524**	**0.289**	**0.556**	**0.560**	**0.30**	**0.54**	**0.72**	**0.63**	**0.57**	**0.47**	**1.6**	**0.58**	**0.51**	**0.54**	**0.5**	**0.543**	**0.557**	**0.512**	**0.527**	**0.523**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	**0.00031 J**	< 0.00020	< 0.00020	< 0.00020	**0.00046 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	**0.00064 J**	< 0.0050	< 0.0050	**0.0064**	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0030 J B**	< 0.0012	< 0.0012	< 0.0012	**0.0055 J**	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.010	< 0.020	< 0.020	**0.0067 J**	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	**0.011**	< 0.010	< 0.010	< 0.010	< 0.0050	**0.021**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.0034 J**	< 0.0050	< 0.0050	**0.0025 J**	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	**0.0034 J**	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	**0.00026 J**	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0040 J**	< 0.0024	< 0.0024	< 0.0024	**0.0039 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	**0.0203**	< 0.0200	< 0.020	< 0.020	**0.022**	**0.016 J**	< 0.0087	**0.014 J**	**0.024**	<0.020	**0.046**	**0.076**	< 0.020	**0.118**	**0.211**	**0.0633**	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date	MW-318 (Continued)																
			7/12/2006	07/06 DUP	2/7/2006	1/11/2006	1/11/2006	7/19/2005	1/17/2005	7/14/2004	1/20/2004	7/15/2003	1/20/2003	7/15/2002	1/21/2002	01/02 DUP	7/17/2001	1/17/2001	01/01 DUP
			Pre-Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	50 R	50 R	--	1,200 U	1,200 U	500 U	25 U	2,500 U	2,500 U	1,300 U	620 U	620 U	620 U	620 U	620 U	620 UJ	25 U
Benzene	5	µg/L	**18**	**19**	--	**3,800**	**3,800**	**4,100**	**2,700 D**	**4,400**	**4,000**	**4,300**	**4,200**	**4,400**	**3,600**	**3,600**	**4,100**	**3,100**	**2,500 D**
Carbon Disulfide	4,000	µg/L	5 U	5 U	--	120 U	120 U	20 U	1.0 U	100 U	100 U	50 U	25 U	25 U	25 U	25 U	25 U	25 U	1.0 U
Ethylbenzene	700	µg/L	5 U	5 U	--	**730**	**720**	**800**	**680 D**	**800**	**810**	**960**	**960**	**1,100**	**650**	**630**	**880**	**710**	**390 E**
Methylene Chloride	5	µg/L	5 U	5 U	77 U	**210**	**200**	100 U	5.0 U	500 U	500 U	250 U	120 U	120 U	120 U	120 U	120 U	120 U	5.0 U
Toluene	1,000	µg/L	5 U	5 U	--	120 U	120 U	20 U	**3.5**	100 U	100 U	50 U	**17 J**	25 U	25 U	25 U	25 U	25 U	**3**
Trichloroethylene	5	µg/L	5 U	5 U	--	120 U	120 U	20 U	1.0 U	100 U	100 U	50 U	25 U	25 U	25 U	25 U	25 U	25 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	5 U	--	250 U	250 U	**77**	**64 D**	200 U	200 U	100 U	**96 B**	**100**	**61**	**62**	**110**	**76**	**80**
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	--	**76**	**72**	**72**	**59**	**76**	**91**	**86**	**95**	**100**	**70**	**54 J**	**85**	**79**	**0.076**
Acenaphthene	2,000	µg/L	10 U	10 U	--	**47**	**45**	**51**	**37**	**52**	**55**	**54**	**58**	**57**	**52**	**40 J**	**51**	**54**	**0.05**
Acenaphthylene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Anthracene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	**0.97**	10 U	**0.86 J**	**0.84 J**	50 U	100 U	50 U	**0.74 J**	**0.72 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.1 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.1 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	33 U	5.0 U	8.0 U	8.0 U	20 U	**2.4**	10 U	**3.1 J**	**2.9 J**	**2.7 J**	100 U	**2.5 J**	**3.3 J**	**3.0 J**
Fluoranthene	1,000	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	**0.44**	10 U	**0.46 J**	**0.42 J**	50 U	100 U	50 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	10 U	--	6.7 U	**5.7**	8.0 U	8.0 U	20 U	**7.5**	10 U	**7.7 J**	**8.3 J**	**5.5 J**	**4.6 J**	**6.0 J**	**7.6 J**	**7.1 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Naphthalene	20	µg/L	10 U	10 U	--	**860**	**790**	**810**	**670**	**950**	**980**	**1,100**	**1,000 D**	**920 D**	**950**	**740**	**1,100 D**	**950 D**	**880 D**
Phenanthrene	10	µg/L	10 U	10 U	--	6.7 U	**5.1**	8.0 U	8.0 U	20 U	**7.1**	10 U	**7.1 J**	**6.8 J**	**6.3 J**	**5.1 J**	**5.0 J**	**6.3 J**	**6.0 J**
Pyrene	1,000	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	**0.46**	0.01 UJ	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	--	**0.541**	0.2 U	**0.714**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.035 B**	0.2 U	0.2 U	**0.057 BN**	0.2 U	**0.18 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	--	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.149**	**0.143**	--	**0.388**	**0.386**	**0.397**	**0.38**	**0.4**	**0.39**	**0.36**	**0.36**	**0.37**	**0.36**	**0.35**	**0.35**	**0.36**	**0.36**
Beryllium	0.004	mg/L	0.01 U	0.01 U	--	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00059 B**
Cadmium	0.005	mg/L	0.005 U	0.005 U	--	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	**43.2**	**41.5**	**47.9**	**40**	**41**	**42**	**41**	**38**	**39**	**38**	**37**	**37**	**36**	**37**
Chromium	0.1	mg/L	0.01 U	0.01 U	--	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0016 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.01 U	--	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0017 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	--	**0.828**	**0.802**	**0.926**	**0.75**	**0.79**	**0.77**	**0.77**	**0.7**	**0.74 N**	**0.7**	**0.66**	**0.74**	**0.74**	**0.72**
Lead	0.015	mg/L	0.01 U	0.01 U	--	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0030 U	**0.0023 B**
Magnesium	*	mg/L	--	--	--	**24**	**23.8**	**26**	**23**	**23**	**24**	**23**	**22**	**22**	**22**	**21**	**22**	**21**	**21**
Manganese	*	mg/L	--	--	--	**0.677**	**0.675**	**0.675**	**0.64**	**0.65**	**0.65**	**0.67**	**0.58**	**0.6**	**0.58**	**0.57**	**0.57**	**0.58**	**0.59**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00014 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	5 U	5 U	**4.37**	**3.8**	**3.9**	**3.7**	**3.7**	**3.3**	**3.5**	**3.4**	**3.4**	**3.4**	**3.6**	**3.6**
Selenium	0.05	mg/L	0.02 U	0.02 U	--	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0047 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	**16.2**	**16.1**	**18**	**15**	**16**	**16**	**19**	**15**	**15**	**14**	**14**	**15**	**15**	**15**
Thallium	0.002	mg/L	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 U	0.002 UWN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.596**	**0.581**	--	0.02 U	0.02 U	**0.0308 J**	**0.028**	**0.026**	0.02 U	**0.03**	**0.02**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-319															
		Sample Date	1/14/2015	7/14/2014	1/7/2014	7/9/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/17/2011	7/13/2011	1/5/2010	7/22/2009	01/14/2009	07/16/2008	1/9/2008	7/11/2007	2/15/2007
		Unit	During Extraction															
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.2 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	**0.075**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	**0.25**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	**0.16**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	**0.33**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	**0.22**	< 0.050	< 0.19	< 0.096	< 0.11	**0.11 J**	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.05	< 0.050	**0.19**	< 0.050	< 0.19	< 0.043	< 0.048	**0.065 J**	< 0.044	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	**0.27**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	**0.14**	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	**0.1**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	**0.29**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	**0.15**	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	**0.033 J**	**0.05 J**	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	**0.056**	**0.085**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.642**	**0.132**	**0.692**	**0.668**	**0.93**	**0.73**	**0.28**	**0.92**	**0.89**	**0.94**	**0.82**	**0.67**	**0.38**	**0.69**	**0.820**	**0.704**	**0.743**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00020 J**	**0.00031 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0028 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	**0.0038 J**	< 0.020	< 0.020	**0.0029 J**	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.027**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	**0.0043 J**	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0036 J**	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0023 J**	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	**0.0094 J**	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-319 (Continued) 7/13/2006	1/12/2006	7/18/2005	1/17/2005	7/13/2004	1/20/2004	7/15/2003	1/21/2003	7/11/2002	1/17/2002	7/16/2001	7/01 DUP	1/16/2001
			Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	**15 J**	25 U	25 U	25 U	25 U	25 UJ
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.33 J**
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.35 J**	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.29 J**
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.49 J**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	**1.72**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.071 B**	**0.2**	**0.05 B**	**0.057 B**	**0.031 J**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0058 B**	0.02 U	**0.0065 J**
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0037 B**	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.736**	**0.642**	**0.603**	**0.61**	**0.6**	**0.6**	**0.52**	**0.6**	**0.55**	**0.67**	**0.62**	**0.62**	**0.68**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00072 B**	0.004 U	0.004 U	0.00073 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**36.5**	**29.5**	**28**	**28**	**29**	**31**	**28**	**28**	**33**	**30**	**30**	**34**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.003 B**	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0047 B**	**0.0042 B**	**0.0058 B**	**0.0053 B**	**0.0048 B**	**0.0058 J**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0019 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**4.23**	**4.03**	**4.1**	**3.8**	**4.3**	**3.8**	**4.3**	**3.5**	**5.3**	**4.4**	**4.3**	**4.7**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0025 U
Magnesium	*	mg/L	--	**16.2**	**13.2**	**13**	**13**	**13**	**12**	**14**	**11**	**16**	**14**	**14**	**15**
Manganese	*	mg/L	--	**1.11**	**1.08**	**1.1**	**1.1**	**1.2**	**1.1**	**1.1**	**0.94**	**1.3 N**	**1.1**	**1.1**	**1.2**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	**0.0052 B**	0.04 U	0.04 U	**0.0055 J**
Potassium	*	mg/L	--	5 U	**3.68**	**3.4**	**3.4**	**3.4**	**3.2**	**3.1**	**3.5**	**3.6 N**	**3.7**	**3.6**	**4.3**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**14.9**	**14.8**	**13**	**14**	**13**	**14**	**14**	**14**	**14**	**15**	**14**	**15**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.04**	**0.04**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-320															
		Sample Date	1/12/2015	7/14/2014	1/6/2014	7/9/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/17/2011	7/13/2010	1/5/2010	7/22/2009	01/14/2009	07/16/2008	1/9/2008	7/11/2007	2/14/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	**0.54 J**	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	**0.45 J**	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	**0.56 J**	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.095	**0.12 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	**0.053**	< 0.050	< 0.20	< 0.095	**0.18 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.095	< 0.11	< 0.11	**0.13 J**	**0.10 J***	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	**0.12**	< 0.10	< 0.20	< 0.095	**0.15 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	**0.066**	< 0.050	< 0.20	< 0.095	**0.38**	< 0.11	**0.13 J**	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.05	< 0.050	< 0.050	**0.051**	< 0.20	< 0.043	**0.23 B**	< 0.048	**0.086 J**	**0.12 J**	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	**0.13**	< 0.10	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	**0.12**	< 0.20	< 0.095	**0.43**	< 0.11	**0.17 J**	**0.22**	< 0.19	**0.36**	**0.022 J**	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	**0.090**	< 0.050	< 0.20	< 0.095	**0.15 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**13**	< 0.50	< 0.50	< 0.50	< 0.20	< 0.095	< 0.11	**0.11 J**	< 0.11	< 0.20	< 0.19	< 0.19	**0.052 J**	0.33	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.095	**0.11 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	**0.081**	< 0.20	< 0.095	**0.30**	< 0.11	**0.14 J**	**0.17 J**	< 0.19	**0.26**	< 0.20	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0287**	**0.268**	**0.264**	**0.267**	**0.096**	**0.26**	**0.29**	**0.076**	**0.25**	**0.097**	**0.097**	**0.27**	**0.22**	**0.27**	**0.284**	**0.240**	**0.278**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0013 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.013**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0018 J**	**0.0018 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-320 (continued) 7/13/2006 Pre-Extraction	1/11/2006	7/20/2005	1/18/2005	7/13/2004	1/20/2004	7/15/2003	1/21/2003	7/11/2002	1/18/2002	7/16/2001	1/17/2001
Volatile Organic Compounds														
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 UJ
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	--	**0.626**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.034 B**	**0.031 J**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.273**	**0.237**	**0.23**	**0.25**	**0.26**	**0.25**	**0.23**	**0.18**	**0.26**	**0.26**	**0.24**	**0.25**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**19.9**	**19.7**	**19**	**19**	**19**	**18**	**22**	**19**	**19**	**18**	**19**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0015 B**	**0.0019 B**	**0.0017 J**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0018 B**	0.02 U	**0.0013 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.71**	**1.78**	**1.7**	**1.7**	**1.8**	**1.7**	**0.097**	**1.8**	**1.8**	**1.7**	**1.8**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.0024 U
Magnesium	*	mg/L	--	**10.8**	**11.3**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**
Manganese	*	mg/L	--	**1.15**	**1.1**	**1.2**	**1.2**	**1.2**	**1.2**	**0.0094 B**	**1.2**	**1.1**	**1.1**	**1.2**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	**2.62**	**2.8**	**2.8**	**2.8**	**2.6**	**3.6**	**2.8**	**2.7**	**2.6**	**2.9**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0043 UJ
Sodium	*	mg/L	--	**9.84**	**10.8**	**9.7**	**10**	**9.8**	**11**	**11**	**10**	**10**	**9.8**	**9.9**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UN	0.002 UW	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.019 B**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-321																	
		Sample Date	1/13/2015	7/14/2014	1/8/2014	7/10/2013	7/10 DUP	1/9/2013	7/25/2012	1/24/2012	7/6/2011	07/11 DUP	1/19/2011	7/15/2010	1/7/2010	7/23/2009	01/21/2009	07/18/2008	1/9/2008	7/10/2007	2/14/2007
		Unit	During Extraction																	
Volatile Organic Compounds																					
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 25	< 25	< 120	< 2500	<4000	< 1000	< 500	< 2000	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	**330**	**360**	**5.0**	< 5.0	**12**	**500**	**650**	**2,900**	**3,300**	**4,000**	**2,600**	**630**	**2,200**	**2,400**	**2,600**	**3,700**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.67 J**	< 3.0	< 3.0	< 15	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.6 J**	**0.82 J**	**1.2 J**	**100 J**	210	**430**	**200**	**37**	**150**	**160**	**120**	**280**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 5.0	< 25	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.40 J**	< 1.7	< 1.7	**24 J**	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.65	< 0.65	< 3.2	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.44 J**	**2.1 J**	**1.9 J**	**8.8 J**	**18 J**	<200	< 50	**10 J**	**27 J**	**58**	**52**	**100**
Semivolatile Organic Compounds																					
Acenaphthene	2,000	µg/L	< 0.5	**2.1**	< 0.50	**13**	**12**	**0.19**	**0.29**	**43 D**	**12**	**24**	**24**	**40**	**30**	**21**	**3.4**	**13**	**32**	**37**	**27**
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 1.0	**0.82**	**0.20**	**1.7**	**0.42**	< 1.0	**0.19 J**	< 19	**1.0**	< 0.94	**0.35**	**0.71**	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	**0.13**	< 0.050	**0.26**	**0.26**	< 0.19	< 0.19	**0.66**	**0.23**	< 1.0	**0.29**	< 19	**0.59**	< 0.94	**0.068 J**	**1.7**	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.043	< 0.048	< 0.45	**0.059 J**	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	**0.12**	**0.11**	< 0.19	< 0.19	**0.28**	**0.12 J**	< 1.0	**0.12 J**	< 19	0.2	< 0.94	0.037 J	**0.098**	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	**0.48**	< 0.10	**2.2**	**2.1**	**0.94**	**0.29**	**7.2**	**2.9**	**5.2**	**3.4**	< 19	**6.5**	**3.5**	**0.75**	**2.1**	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	< 0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**5.7**	**3.3**	< 0.50	**240**	**150**	**13**	**3.9**	**1,100 D**	**250**	**470**	**560**	**1,000**	**680**	**610**	**66**	**3.0**	**410**	**350**	**570**
Phenanthrene	10	µg/L	< 0.05	**0.7**	< 0.050	**1.8**	**1.7**	**1.1**	**0.48**	**5.8**	**1.7**	**3.1**	**2.2**	< 19	**4.3**	**2.2**	**0.46**	**1.7**	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	**0.11**	< 0.050	**0.096**	**0.100**	< 0.19	< 0.19	**0.29**	**0.14 J**	< 1.0	**0.14 J**	< 19	<0.20	< 0.94	**0.043 J**	**0.11 J**	<10	< 10	< 10
Inorganic Compounds																					
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0606**	**0.0573**	**0.0662**	**0.244**	**0.237**	**0.14**	**0.094**	**0.30**	**0.30**	**0.27**	**0.30**	**0.31**	**0.30**	**0.32**	**0.26**	**0.31**	**0.321**	**0.294**	**0.314**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00026 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0030 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.013**	**0.016**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0029 J**	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	**0.0017 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-321 (Continued)																
			7/11/2006	7/06 DUP	1/14/2006	01/06 DUP	7/21/2005	1/21/2005	7/16/2004	1/23/2004	01/04 DUP	7/17/2003	07/03 DUP	1/22/2003	01/03 DUP	7/15/2002	1/22/2002	7/18/2001	1/22/2001
			Pre-Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	50 R	50 R	2,500 U	2,500 U	500 U	1,200 U	1,200 U	1,200 U	1,200 U	1,300 U	1,300 U	1,200 U	1,200 U	250 U	250 U	**250 R**	250 U
Benzene	5	µg/L	**4,500**	**5,100**	**6,200**	**6,100**	**5,300**	**6,500**	**6,900**	**6,500**	**6,900**	**6,500**	**6,400**	**5,700**	**5,700**	**4,800 D**	**6,000 D**	**7,900 D**	**1,800**
Carbon Disulfide	4,000	µg/L	5 U	5 U	250 U	250 U	20 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	10 U	10 U	10 U	10 U
Ethylbenzene	700	µg/L	**340**	**380**	**1,300**	**1,200**	**1,200**	**1,400**	**1,400**	**1,500**	**1,500**	**1,400**	**1,400**	**1,000**	**980**	**1,100**	**1,100**	**1,600**	**360**
Methylene Chloride	5	µg/L	5 U	5 U	250 U	250 U	100 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	50 U	50 U	50 U	50 U
Toluene	1,000	µg/L	5 U	5 U	250 U	250 U	20 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**12**	**10**	**110**	**9.6 J**
Trichloroethylene	5	µg/L	5 U	5 U	250 U	250 U	20 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	10 U	10 U	10 U	10 U
Xylenes, total	2,000	µg/L	**110**	**110**	500 U	500 U	**260**	**260**	**290**	**360**	**370**	**550**	**560**	**490**	**500**	**560**	**610**	**890**	**290**
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	**280**	**330**	**270**	**240**	**230**	**320**	**330**	**280**	**250**	**170 DJ**	**180 DJ**	**38**	**360**	**320**	**300**
Acenaphthene	2,000	µg/L	**63**	**57**	**130**	**130**	**98**	**84**	80 U	**50**	**85**	**110**	**99**	**88**	**90**	**8.2 J**	**120**	**120**	**110**
Acenaphthylene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**0.34**	**0.58**	10 U	10 U	**1.3 J**	**1.2 J**	**3.4 J**	10 U	50 U	10 U
Anthracene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**2.5**	**2.3**	10 U	10 U	**1.7 J**	**1.8 J**	10 U	10 U	**2.1 J**	**2.5 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.1 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.1 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Dibenzofuran	1	µg/L	--	--	80 U	100 U	20 U	40 U	80 U	**3.0**	**2.3**	10 U	10 U	**3.8 J**	**4.0 J**	**0.45 J**	**5.5 J**	**5.1 J**	**4.7 J**
Fluoranthene	1,000	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**0.96**	**0.89**	10 U	10 U	**0.78 J**	**0.85 J**	10 U	10 U	50 U	**0.97 J**
Fluorene	1,000	µg/L	**11**	10 U	**17**	20 U	20 U	40 U	80 U	**12**	**11**	**17**	**16**	**17**	**17**	**1.5 J**	**19 J**	**19 J**	**18**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Naphthalene	20	µg/L	**1,500 J**	**150 J**	**2,700**	**3,300**	**3,000**	**2,500**	**2,600**	**3,000**	**3,000**	**4,800**	**3,800**	**1,900 D**	**1,900 D**	**540 D**	**2,900 D**	**3,300D**	**4,000 D**
Phenanthrene	10	µg/L	10 U	10 U	**23**	**23**	20 U	40 U	80 U	**16**	**16**	**16**	**14**	**14**	**15**	**1.0 J**	**21 J**	**20 J**	**17**
Pyrene	1,000	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**0.99**	**0.92**	10 U	10 U	**0.82 J**	**0.72 J**	10 U	10 U	50 U	**0.94 J**
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	**0.293**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.22**	0.2 U	0.2 U	**0.031 BN**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.01 U	0.01 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.325**	**0.309**	**0.288**	**0.281**	**0.283**	**0.27**	**0.27**	**0.26**	**0.24**	**0.25**	**0.25**	**0.26**	**0.26**	**0.31**	**0.24**	**0.23**	**0.25**
Beryllium	0.004	mg/L	0.01 U	0.01 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**40.7**	**39**	**38.1**	**38**	**35**	**36**	**35**	**32**	**33**	**33**	**33**	**35**	**31**	**31**	**32**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0049 B**	**0.0052 B**	**0.0066 B**	0.01 U	0.01 U	**0.0018 B**
Cobalt	*	mg/L	--	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0025 B**	**0.0021 B**	**0.0027 B**	**0.0012 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	**0.529**	**0.523**	**0.526**	**0.49**	**0.43**	**0.46**	**0.45**	**0.41**	**0.37**	**0.4**	**0.43**	**0.72 N**	**0.43**	**0.41**	**0.45**
Lead	0.015	mg/L	0.01 U	0.01 U	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	**16.9**	**16.6**	**15.4**	**16**	**14**	**14**	**14**	**14**	**15**	**14**	**14**	**14**	**13**	**13**	**13**
Manganese	*	mg/L	--	--	**0.308**	**0.301**	**0.307**	**0.31**	**0.29**	**0.29**	**0.27**	**0.27**	**0.27**	**0.26**	**0.26**	**0.31**	**0.25**	**0.25**	**0.27**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 UJ	**0.000097 B**	**0.00009 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0057 B**	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	5 U	5 U	**3.19**	**3.7**	**3.7**	**3.5**	**3.3**	**3.2**	**3.6**	**5.4**	**5.5**	**8.5**	**3**	**3.1**	**3.1**
Selenium	0.05	mg/L	0.02 U	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0049 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**16.7**	**16.2**	**17**	**15**	**15**	**15**	**15**	**15**	**16**	**15**	**15**	**15**	**15**	**14**	**14**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 UWN	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.07**	**0.012 B**	**0.016 B**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-324															
		Sample Date	1/13/2015	7/14/2014	1/8/2014	7/10/2013	1/9/2013	7/25/2012	1/24/2012	7/5/2011	1/19/2011	7/15/2010	1/7/2010	7/29/2009	1/15/2009	7/18/2008	1/10/2008	7/10/2007	2/14/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 50	< 5.0	< 5.0	< 2000	< 100	< 100	< 1000	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**20**	**1,200 J H**	< 0.25	**11**	**1,600**	**6,400 D**	< 5.0	**870**	**80**	**18**	**2,300**	**3,700**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 0.60	**2.4 J**	< 100	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**25 J**	< 0.11	**2.5 J**	**190**	**900**	< 5.0	**110**	**9.1**	< 5.0	**160**	**440**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 1.0	< 100	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**7.4 J**	< 0.33	**1.2 J**	7.4 J	**52**	< 5.0	**4.4 JB**	**0.75 J**	< 5.0	**19**	**24**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.13	< 0.13	< 100	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**29 J**	< 0.20	**0.44 J**	**25 J**	**150**	< 5.0	**14 J**	**2.1**	< 5.0	**49**	**140**
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	**0.35**	**0.24**	< 0.11	< 0.099	< 19	**49**	< 0.19 *	**3.5 J**	**0.4**	< 10	**21**	**36**
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**0.96**	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**1.2**	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.043	< 0.050	< 0.044	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**0.87**	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**8.7**	< 0.19	**0.54 J**	**0.055**	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**5.3**	**0.7**	**0.98**	< 0.50	**0.70**	**3.9**	**6.1**	< 0.11	**1.6**	**290**	**1,600**	< 0.19	**100 B**	**0.15**	< 10	**290**	**760**
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	**0.15 J**	< 0.11	< 0.099 *	< 19	**8.1**	< 0.19	**0.68 J**	**0.065**	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**0.87**	< 0.19	< 3.9	**0.034**	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0232**	**0.0657**	**0.0674**	**0.0693**	**0.061**	**0.089**	**0.081**	**0.079**	**0.078**	**0.072**	**0.21**	**0.066**	**0.082**	**0.076**	**0.0690**	**0.0849**	**0.181**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00022 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	**0.0066**	**0.0073**	< 0.0050	< 0.0020	**0.0020 J**	**0.0020 J**	< 0.0050	< 0.0050	< 0.0050	**0.00069 J**	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0043 J**	**0.0013 J**	< 0.010	< 0.010	< 0.010	**0.0028 J**	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	**0.0176**	**0.0161**	**0.0192**	< 0.020	< 0.020	**0.0040 J**	**0.0064 J**	**0.0098 JB**	< 0.020	< 0.020	< 0.020	**0.013 J**	**0.0097 J**	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0095 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0031 J**	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0028 J**	**0.0029 J**	**0.0034 J**	< 0.040	< 0.040	< 0.040	**0.0088 J**	**0.0069 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0052 J**	**0.0042 J**	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0205**	< 0.0200	< 0.0200	**0.0337**	< 0.020	< 0.020	< 0.0087	**0.0091 J**	< 0.0087	< 0.020	< 0.020	< 0.020	**0.033**	**0.018 J**	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-324 (Continued)												
			7/11/2006	1/14/2006	01/06 DUP	7/22/2005	1/19/2005	7/16/2004	1/23/2004	7/17/2003	1/22/2003	7/11/2002	07/02 DUP	1/23/2002	7/18/2001
		µg/L	Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	5,000 U	5,000 U	830 U	2,500 U	2,500 U	2,500 U	630 U	5,000 U	5,000 U	5,000 U	5,000 U	**5,000 R**
Benzene	5	µg/L	**1,900**	**13,000**	**13,000**	**14,000**	**12,000**	**14,000**	**16,000**	**15,000**	**14,000**	**15,000**	**12,000**	**16,000**	**15,000**
Carbon Disulfide	4,000	µg/L	5 U	500 U	500 U	33 U	100 U	100 U	100 U	25 U	200 U	200 U	200 U	200 U	200 U
Ethylbenzene	700	µg/L	**89**	**2,000**	**2,100**	**2,100**	**2,500**	**2,500**	**2,600**	**2,500**	**2,400**	**2,500**	**2,500**	**2,800**	**2,700**
Methylene Chloride	5	µg/L	5 U	500 U	500 U	170 U	500 U	500 U	500 U	130 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
Toluene	1,000	µg/L	**29**	500 U	500 U	**520**	**540**	**320**	**720**	**1,100**	**1,400**	**1,200**	**1,300**	**1,900**	**2,600**
Trichloroethylene	5	µg/L	5 U	500 U	500 U	33 U	100 U	100 U	100 U	25 U	200 U	200 U	200 U	200 U	200 U
Xylenes, total	2,000	µg/L	**90**	**1,000**	**1,100**	**1,500**	**1,600**	**1,500**	**1,800**	**1,700**	**1,800**	**1,700**	**1,800**	**2,300**	**2,400**
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	**430**	**490**	**390**	**320**	**290**	**390**	**370 J M**	**700**	**480**	**440**	**770**	**670**
Acenaphthene	2,000	µg/L	**20**	**180**	**180**	**120**	**110**	**110**	**110**	**120 J M**	**230**	**180**	**160**	**230**	**230**
Acenaphthylene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	**4.0**	**11**	**21 J**	**9.7 J**	**9.4 J**	100 U	**28 J**
Anthracene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	**4.8 J**	**4.9 J**	**4.6 J**	**4.5 J**	**3.8 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(g,h,i)perylene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(k)fluoranthene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Chrysene	0.2	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Dibenzofuran	1	µg/L	--	20 U	100 U	20 U	100 U	80 U	2.0 U	10 U	**8.8 J**	**6.6 J**	**6.7 J**	**11 J**	**8.9 J**
Fluoranthene	1,000	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Fluorene	1,000	µg/L	10 U	**23**	**24**	20 U	100 U	80 U	**23**	**21**	**35 J**	**29 J**	**26 J**	**38 J**	**35 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Naphthalene	20	µg/L	**170**	**4,400**	**4,300**	**3,500**	**3,700**	**3,600**	**4,600**	**4,400 J M**	**7,500 D**	**5,000 D**	**4,400 D**	**5,900 D**	**8,600 D**
Phenanthrene	10	µg/L	10 U	**27**	**28**	20 U	100 U	80 U	**22**	**18**	**36 J**	**26 J**	**26 J**	**41 J**	**34 J**
Pyrene	1,000	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	**0.303**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.058 B**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0682**	**0.243**	**0.239**	**0.237**	**0.24**	**0.23**	**0.21**	**0.21**	**0.22**	**0.24**	**0.24**	**0.22**	**0.22**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**40.9**	**39.8**	**43.2**	**38**	**37**	**37**	**33**	**35**	**34**	**34**	**35**	**44**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0015 B**	**0.00092 B**	0.02 U	**0.0017 B**	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	**0.11**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**0.62**	**0.516**	**0.533**	**0.48**	**0.46**	**0.37**	**0.38**	**0.36**	**0.33**	**0.31**	**0.37**	**0.37**
Lead	0.015	mg/L	0.01 U	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0019 B**	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	**13.8**	**13.6**	**14.1**	**13**	**12**	**11**	**11**	**11**	**11**	**11**	**11**	**10**
Manganese	*	mg/L	--	**0.33**	**0.324**	**0.333**	**0.34**	**0.32**	**0.29**	**0.28**	**0.28**	**0.29**	**0.29**	**0.26**	**0.23**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	**0.000095 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	5 U	**3.58**	**3.7**	**3.7**	**4.4**	**3.1**	**3.4**	**3.6**	**3.6**	**3.3**	**4.4**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.006 B**	0.01 U
Sodium	*	mg/L	--	**16.3**	**16.1**	**17.9**	**15**	**15**	**18**	**15**	**15**	**17**	**17**	**15**	**16**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 UJ	0.002 U	0.002 UN	0.002 UN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.019 B**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-325															
		Sample Date	1/13/2015	7/14/2014	1/6/2014	7/9/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/18/2011	7/13/2010	1/6/2010	7/21/2009	1/14/2009	7/17/2008	1/9/2008	7/11/2007	2/15/2007
		Unit	During Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100 U	< 100	< 100	< 100	**120**	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.36 J**	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**3,700**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**440**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	**0.49 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**24**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	**0.31 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**140**
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	**36**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.043	< 0.045	< 0.050	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	**0.058 J**	< 0.19	< 10	< 10	**760**
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	**0.0047 J**	< 0.0046	**0.0047 J**	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0553**	**0.0744**	**0.0326**	**0.0284**	**0.026**	**0.022**	**0.025**	**0.027**	**0.023**	**0.022**	**0.033**	**0.025**	**0.025**	**0.03**	**0.0413**	**0.0571**	**0.181**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	**0.009**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	**0.00093 J**	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	**0.0023 J**	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0083 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0023 J**	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	<0.010	**0.0029 J**	**0.0034 J**	**0.0027 J**	**0.0029 J**	**0.0027 J**	< 0.010	< 0.010	**0.0039 J**	**0.0034 J**	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0573**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	**0.015 J**	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-325 (Continued) 7/13/2006	1/12/2006	7/19/2005	1/17/2005	7/14/2004	1/21/2004	7/15/2003	1/21/2003	7/12/2002	1/18/2002	7/17/2001
			Pre-Extraction										
Volatile Organic Compounds													
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**	1.0 U	**0.13 J**
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1**	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.3 J**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.35 J**	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds													
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.35 J**	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	**0.28**	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U
Inorganic Compounds													
Aluminum (fume or dust)	*	mg/L	--	**0.817**	**0.978**	**0.25**	0.2 U	0.2 U	**2.7**	0.2 U	**0.2 B**	**2.1**	**30 N**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.021**
Barium	2	mg/L	**0.134**	0.2 U	**0.102**	**0.09**	**0.097**	**0.091**	**0.12**	**0.042**	**0.072**	**0.12**	**0.38**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0042**
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	**0.002 B**
Calcium metal	*	mg/L	--	**18.5**	**25.2**	**16**	**20**	**16**	**24**	**3.2**	**21**	**27**	**65**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.03**	0.01 U	**0.0061 B**	**0.17**	**0.23**
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0036 B**	**0.058**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0018 B**	**0.0015 B**	**0.0073 B**	**0.059**
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.13**	**0.54**	**0.54**	**0.28**	**0.45**	**4.8**	**0.035 B**	**0.17**	**3.6**	**41**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.01**	0.005 U	0.005 U	**0.0039 B**	**0.063**
Magnesium	*	mg/L	--	**7.93**	**7.87**	**6.7**	**7**	**7.4**	**9.7**	**0.65**	**3.3**	**8.7**	**30**
Manganese	*	mg/L	--	**0.258**	**0.28**	**0.24**	**0.26**	**0.28**	**0.35**	**0.0016 B**	**0.057**	**0.25**	**0.97**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	**0.0049 B**	**0.11**	**0.18**
Potassium	*	mg/L	--	5 U	**3.16**	**4**	**3.5**	**2.9**	**4.2**	**8.4**	**8**	**6.2**	**15**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0061 B**	0.01 U
Sodium	*	mg/L	--	**11.8**	**12.9**	**12**	**12**	**12**	**13**	**13**	**13**	**12**	**12**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	0.002 UW	0.002 UWN
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0025 B**	**0.0052 B**	**0.062**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.07**	**0.023**	0.02 U	**0.039**	**0.62**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-500BR															
		Sample Date	1/14/2015	7/16/2014	1/8/2014	7/9/2013	1/10/2013	7/26/2012	1/18/2012	7/6/2011	1/19/2011	7/13/2010	1/12/2010	7/23/2009	1/09 DUP	1/13/2009	7/17/2008	1/9/2008	7/10/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 5000	< 5000	< 5,000	< 50	< 10,000	< 5,000	< 250	**330 J**	< 250	< 5000	< 5000	< 10000	< 5000	< 5000	< 500	< 50	< 50
Benzene	5	µg/L	**13,000**	**9,300**	**10,000**	**9,200**	**9,700**	**14,000**	**11,000**	**9,800**	**8,200**	**7,000**	**5,200**	**5,600**	**6,400**	**5,600**	**4,300**	**12,000**	**7,700**
Carbon Disulfide	4,000	µg/L	< 500	< 500	< 500	< 5.0	< 500	< 250	< 30	< 30	< 30	< 250	< 250	< 500	< 250	< 250	< 25	< 5.0	< 5.0
Ethylbenzene	700	µg/L	**1,200**	**620**	**1,000**	**420**	**820**	**1,600**	**1,000**	**730**	**820**	**620**	**470**	< 500	**570**	**390**	**530**	**1,300**	**620**
Methylene Chloride	5	µg/L	< 500	< 500	< 500	< 5.0	< 500	< 250	< 50	< 50	< 50	< 250	<250	< 500	< 250	< 250	< 25	< 5.0	< 5.0
Toluene	1,000	µg/L	< 500	< 500	< 500	**11**	< 500	< 250	**24 J**	**57 J**	**68 J**	**29 J**	< 250	< 500	**38 J**	**36 J**	**38**	**140**	**15**
Trichloroethylene	5	µg/L	< 500	< 500	< 500	< 5.0	< 500	< 250	< 6.5	< 6.5	< 6.5	< 250	< 250	< 500	< 250	< 250	< 25	< 5.0	< 5.0
Xylenes, total	2,000	µg/L	**610**	< 500	**670**	**450**	**560**	**1100**	**790**	**780**	**760**	**640**	**420**	< 500	**470**	**310**	**350**	**850**	**280**
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	**86**	**48**	**71**	**30**	**42**	< 210	**110**	**60**	**67**	**42**	**38**	**39**	**15**	**15**	**32**	**91 J**	**23**
Acenaphthylene	10	µg/L	**1.2**	< 1.0	**2.2**	**1.7**	< 19	< 210	**2.3**	**1.4**	**1.6 J**	**1.0 J**	**1.9**	< 2.0	< 9.4	< 9.4	**1.1 J**	< 10	< 10
Anthracene	10	µg/L	**1.6**	**0.69**	**1.1**	**0.082**	< 19	< 210	**1.0**	**0.68**	< 0.99	< 1.9	**0.30**	< 2.0	< 9.4	< 9.4	**0.34 J**	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.50 J**	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.32 J**	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9 *	<0.19	< 2.0	< 9.4	< 9.4	**0.43 J**	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	< 1.9	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.40 J**	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.046	< 0.043	< 0.44	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.41 J**	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.30 J**	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	**0.51**	**0.2**	**0.31**	< 0.10	< 19	< 210	**0.31**	**0.17 J**	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	< 1.9	< 10	< 10
Fluorene	1,000	µg/L	**14**	**5.3**	**9.4**	**1.6**	< 19	< 210	**2.6**	**11**	**9.3**	**5.5**	**2.9**	**4.8**	**1.6 J**	**1.5 J**	**3.0**	**16 J**	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.27 J**	< 0.050	< 0.050
Naphthalene	20	µg/L	**2,800**	**770**	**2,500**	**460**	**770**	**1600**	**3,100**	**1,300**	**980**	**630**	**550**	**560**	**310**	**310**	**380**	**3,900 J**	**330**
Phenanthrene	10	µg/L	**12**	**4.4**	**6.6**	**0.067**	< 19	< 210	**9.2**	**5.1**	**4.4**	**4.0**	**2.3**	< 2.0	< 9.4	< 9.4	**1.5 J**	**13 J**	< 10
Pyrene	1,000	µg/L	**0.59**	**0.18**	**0.31**	**0.093**	< 19	< 210	**0.32**	**0.20**	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.27 J**	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.050	< 0.050
Barium	2	mg/L	**0.364**	**0.347**	**0.441**	**0.475**	**0.45**	**0.50**	**0.57**	**0.42**	**0.45**	**0.41**	**0.38**	**0.35**	**0.32**	**0.32**	**0.29**	**0.437**	**0.236**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	**0.0096**	**0.0108**	**0.0081**	< 0.0050	**0.0029 J**	< 0.0020	**0.0027 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0034 JB**	**0.0025 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0027 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.020	< 0.020
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0686**	**0.0890**	**0.161**	**0.111**	**0.056**	**0.063**	**0.063**	**0.063**	**0.15**	**0.16**	**0.24**	**0.04**	**0.26**	**0.27**	**0.20**	**0.311**	**1.78**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-503BR													MW-504BR											
		Sample Date	1/15/2015	7/16/2014	1/13/2014	7/11/2013	1/10/2013	7/26/2012	1/19/2012	7/6/2011	1/19/2011	7/19/2010	1/12/2010	7/29/2009	1/19/2009	1/14/2015	7/16/2014	1/8/2014	7/10/2013	1/10/2013	7/26/2012	1/19/2012	7/7/2011	1/20/2011	7/19/2010	1/12/2010	7/23/2009	1/15/2009
		Unit	During Extraction													During Extraction											
Volatile Organic Compounds																											
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 200	< 100	**13 J**	< 50	< 5.0	< 5000	<2000	< 20000	< 20000	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 1000	< 1000	< 1000	< 2000
Benzene	5	µg/L	**35**	**910**	< 5.0	**180**	**300**	**770 D**	**20**	**1,200**	< 0.25	**5,200**	**1,700**	**13,000**	**26,000**	< 5	**570**	< 5.0	< 5.0	**160**	**51**	**300**	**43**	**120**	**610**	**650**	**950**	**2600**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 0.60	< 6.0	< 0.60	< 250	<100	< 1000	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 50	< 50	< 50	**14 J**
Ethylbenzene	700	µg/L	< 5	**86**	< 5.0	**18**	**44**	**36**	**2.2 J**	**70**	**1.7 J**	**370**	**120**	< 1000	**1,100**	< 5	**130**	< 5.0	< 5.0	**22**	**8.0**	**41**	**8.4**	**4.1 J**	**110**	**110**	**180**	< 100
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 1.0	< 10	< 1.0	< 250	<100	< 1000	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 50	< 50	< 50	**230**
Toluene	1,000	µg/L	**12**	**270**	< 5.0	**77**	< 10	**230**	**8.7**	**410**	**1.1 J**	**2,100**	**620**	**4,600**	**8,500**	< 5	**220**	< 5.0	< 5.0	**49**	**16**	**86**	**16**	**2.8 J**	**260**	**150**	**210**	**150 B**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	**0.22 J**	< 1.3	< 0.13	< 250	<100	< 1000	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 50	< 50	< 50	< 100
Xylenes, total	2,000	µg/L	< 5	**100**	< 5.0	**26**	**22**	**88**	**3.4 J**	**130**	**0.29 J**	**740**	**180**	< 1000	**2,200**	< 5.0	**110**	< 5.0	< 5.0	**23**	**8.4**	**45**	**8.6**	**4.6 J**	**140**	**83**	**110**	**120**
Semivolatile Organic Compounds																											
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	**2.8**	< 20	**0.22**	**2.1**	< 0.099	**9.8**	**2.8**	< 3.8 *	**21 J***	< 0.5	< 0.50	< 0.50	< 0.50	**0.38**	**0.24**	**1.6 J**	**0.35**	**14**	**1.6 J**	< 1.9	**6.4**	**6.0 J**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**0.39**	< 20	**0.20**	**1.9**	< 0.099	**7.3 J**	**2.4**	**8.7**	**66 ***	< 1	< 1.0	< 1.0	< 1.0	**0.31**	< 0.22	**1.2 J**	**0.23**	**0.47**	**2.8**	< 1.9	**9.9**	**3.0 J**
Anthracene	10	µg/L	< 0.050	**0.05**	< 0.050	**0.053**	< 0.20	< 20	< 0.096	**0.24**	< 0.099	< 9.4	< 1.9	< 3.8	< 38 *	< 0.05	**0.25**	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	**0.098 J**	**0.17 J**	< 1.9	< 1.9	< 3.9	< 19
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.098 J**	**0.16 J**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.11 J**	**0.16 J**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 20	**0.15 J**	**0.10 J**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 20	**0.097 J**	**0.21**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	< 0.096	**0.19**	< 0.099	< 9.4	< 1.9	< 3.8	< 38 *	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.075 J**	**0.20**	< 0.045	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.46	< 0.045	< 0.045	< 1.9	< 1.9	< 3.9	< 19
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 20	< 0.096	**0.25**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 20	**0.14 J**	**0.19**	< 0.099	< 9.4	< 1.9	< 3.8	< 38 *	< 0.1	**0.11**	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Fluorene	1,000	µg/L	< 0.10	**0.36**	< 0.10	**0.28**	**0.98**	< 20	**0.17 J**	**2.3**	< 0.099	**6.6 J**	**2.5**	**5**	**22 J***	< 0.1	**1.2**	< 0.10	< 0.10	**0.27**	**0.22**	**1.2 J**	**0.57**	**2.1**	**1.7 J**	**2.7**	**8.6**	< 19
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	< 0.096	**0.20**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Naphthalene	20	µg/L	< 0.5	< 0.50	<0.50	**5.1**	**1.1**	**290 D**	**1.6**	**1.2**	**0.22**	**910**	**64**	**1,300 B**	**3,700**	**0.65**	< 0.50	< 0.50	< 0.50	**12**	< 0.22	**91**	**0.42**	**11**	**120**	< 1.9	**410**	**370 B**
Phenanthrene	10	µg/L	< 0.05	**0.23**	< 0.050	**0.18**	**0.99**	< 20	**0.13 J**	**1.3**	< 0.099	**6.1 J**	**2.4**	**4.9**	**21 J***	**0.088**	**1.3**	**0.056**	< 0.050	**0.24**	< 0.22	**1.0 J**	**0.40**	**0.18 J***	**1.7 J**	**2.1**	**8**	< 19
Pyrene	1,000	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.21**	**0.26**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.05	**0.12**	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Inorganic Compounds																											
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010
Barium	2	mg/L	< 0.02	**0.0202**	<0.0200	**0.0214**	**0.071**	**0.046**	**0.034**	**0.058**	**0.031**	**0.19**	**0.14**	**0.32**	**0.35**	**0.184**	**0.155**	**0.105**	**0.126**	**0.18**	**0.19**	**0.26**	**0.25**	**1.0**	**0.36**	**0.36**	**0.41**	**0.26**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00024 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00029 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	**0.0103**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	**0.0043 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0014 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0030 J**	**0.0030 J**	**0.011 JB**	**0.0028 J**	< 0.020	< 0.020	< 0.020	< 0.01	< 0.0100	< 0.0100	**0.0110**	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0031 JB**	**0.0027 J**	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.012**	**0.011**	< 0.010	< 0.010	< 0.010	< 0.010	**0.021**	**0.013**	< 0.010	< 0.010	< 0.010	< 0.010	**0.013**	**0.0099 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	**0.00078**	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0026 J**	**0.0024 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0025 J**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010
Thallium	0.002	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0020 J**
Zinc	2	mg/L	**0.0378**	< 0.0200	**0.0365**	**0.0641**	**0.069**	< 0.020	**0.024**	**0.051**	**0.066**	**0.036**	**0.089**	< 0.020	< 0.020	**0.121**	**0.0429**	**0.248**	**0.327**	**0.029**	**0.027**	**0.0097 J**	**0.015 J**	< 0.0087	**0.024**	< 0.020	< 0.020	< 0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-506BR - DESTROYED								MW-507BR												
		Sample Date	7/26/2012	1/25/2012	7/5/2011	1/19/2011	7/13/2010	1/7/2010	7/28/2009	1/15/2009	1/15/2015	7/17/2014	1/13/2014	7/11/2013	1/10/2013	7/26/2012	1/19/2012	7/6/2011	1/19/2011	7/13/2010	1/7/2010	7/28/2009	1/15/2009
		Unit	During Extraction								During Extraction												
Volatile Organic Compounds																							
Acetone	4,000	µg/L	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100
Benzene	5	µg/L	< 5.0	**0.29 J**	< 0.25	**0.97 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	**0.80 J**	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	**26**	**27**	**13**
Ethylbenzene	700	µg/L	< 5.0	< 0.11	< 0.11	**1.6 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0
Methylene Chloride	5	µg/L	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 0.33	< 0.33	**1.3 J**	< 5.0	< 5.0	< 5.0	**0.49 JB**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**1.0 J**	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethylene	5	µg/L	**22**	**25**	**8.3**	**7.2**	**4.3 J**	**7.9**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes, total	2,000	µg/L	< 5.0	**0.24 J**	< 0.20	**0.23 J**	**0.21 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**1.5**	**5.6**	**2.3**	**2.1**	**2.7**	**3.4**	**1.7**	**1.5**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Acenaphthylene	10	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	**0.037 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Anthracene	10	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benz(a)anthracene	0.1	µg/L	< 0.19	**0.52**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benzo(a)pyrene	0.2	µg/L	< 0.19	**0.51**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	**0.71 ***	< 0.11	< 0.11	< 0.19 *	< 0.19	< 0.19	< 0.19	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19 *	< 0.19	< 0.19	< 0.19
Benzo(g,h,i)perylene	10	µg/L	< 0.19	**0.50**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benzo(k)fluoranthene	10	µg/L	< 0.19	**0.71**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Chrysene	0.2	µg/L	< 0.19	**0.61**	< 0.048	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.049	< 0.049	< 0.046	< 0.19	< 0.19	< 0.19	< 0.19
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	**0.66**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Fluoranthene	1,000	µg/L	< 0.19	**0.12 J**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Fluorene	1,000	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	**0.56**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	0.072	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Naphthalene	20	µg/L	< 0.19	**0.47**	**0.21**	**0.54**	< 0.19	< 0.19	< 0.19	**0.11 JB**	< 0.50	< 0.50	**1.4**	< 0.50	< 0.19	< 0.19	< 0.11	**0.20 J**	**0.22**	< 0.19	< 0.19	< 0.19	< 0.19
Phenanthrene	10	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Pyrene	1,000	µg/L	< 0.19	**0.15 J**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010
Barium	2	mg/L	**0.45**	**0.40**	**0.29**	**0.37**	**0.32**	**0.45**	**0.38**	**0.075**	**0.0698**	**0.0618**	**0.0697**	**0.0798**	**0.22**	**0.20**	**0.078**	**0.073**	**0.19**	**0.087**	**0.30**	**0.31**	**0.29**
Beryllium	0.004	mg/L	< 0.0040	< 0.00020	< 0.00020	**0.00026 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00036 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.010	< 0.0012	**0.011**	**0.019**	**0.025**	**0.025**	**0.035**	**0.051**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0012 J**	< 0.010	< 0.010	< 0.010	**0.0015 J**
Copper	1.3	mg/L	< 0.020	< 0.0019	< 0.0019	**0.0051 JB**	**0.0059 J**	< 0.020	< 0.020	**0.012 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0044 JB**	**0.0032 J**	< 0.020	< 0.020	**0.0028 J**
Cyanide	0.2	mg/L	< 0.010	< 0.0050	**0.012**	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0076 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.040	< 0.0023	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0035 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040
Selenium	0.05	mg/L	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	**0.010 J**	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010
Thallium	0.002	mg/L	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.010	**0.0041 J**	**0.0048 J**	**0.0064 J**	**0.0066 J**	< 0.010	< 0.010	0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0028 J**	**0.0033 J**	**0.0037 J**	**0.0030 J**	< 0.010	< 0.010	**0.0025 J**
Zinc	2	mg/L	< 0.020	< 0.0087	< 0.0087	**0.0097 J**	< 0.020	< 0.020	< 0.020	**0.011 J**	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.0090 J**	**0.019 J**	**0.03**	< 0.020	**0.017 J**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-508BR													MW-509BR												
		Sample Date	1/15/2015	7/17/2014	1/14/2014	7/10/2013	1/8/2013	7/25/2012	1/19/2012	7/6/2011	1/19/2011	7/13/2010	1/7/2010	7/28/2009	1/15/2009	1/15/2015	7/17/2014	1/13/2014	7/11/2013	1/10/2013	7/26/2012	1/19/2012	7/7/2011	1/19/2011	7/15/2010	1/11/2010	7/29/2009	1/15/2009
		Unit	During Extraction													During Extraction												
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	**11 J**	< 5.0	< 100	< 100	< 100	**50 J**	< 50	< 2500	< 50	< 50	< 2,000	< 2,000	< 50	< 50	< 100	< 2000	< 5000	< 5000	< 10000
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.34 J**	**0.38 J**	**0.68 J**	**0.43 J**	< 5.0	< 5.0	**0.37 J**	**2500**	**7400**	< 5.0	**2,800**	**2,600**	**1,100**	**3,500**	**880**	**2,800**	**1,500**	**5,400**	**4,900**	**7,600**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	**7.5**	< 5.0	< 250	< 5.0	< 5.0	< 100	< 100	< 6.0	< 6.0	< 12	< 100	< 250	< 250	< 500
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	**260**	**910**	< 5.0	**440**	**310**	**120**	**360**	**59**	**240**	**76 J**	**460**	**370**	< 500
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 5.0	< 5.0	< 100	< 100	< 10	< 10	< 20	< 100	< 250	< 250	**710**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**1.0 J**	< 5.0	< 5.0	< 5.0	**0.37 JB**	**460**	< 250	< 5.0	**78**	**600**	**210**	**830**	**360**	**950**	**490**	**2,300**	**1,900**	**1,900 B**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 5.0	< 5.0	< 100	< 100	< 1.3	< 1.3	< 2.6	< 100	< 250	< 250	< 500
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	**160**	< 250	< 5.0	**150**	**230**	< 100	**300**	**84**	**360**	**170**	**970**	**710**	**1,000**
Semivolatile Organic Compounds																												
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	**0.025 J**	**16**	**12**	< 0.50	< 50	< 20	< 20	**42 D**	**1.1**	**13**	< 19	**21**	**15 ***	**30 J**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**0.31**	< 0.19	**0.34**	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	**0.022 J**	**8**	**2.2**	< 1.0	**2.8**	< 20	< 20	**49 D**	**0.36**	**16**	< 19	**41**	**29**	**30 J**
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**0.91**	**0.7**	< 0.050	**0.86**	< 20	< 20	**4.0 J D**	**0.54**	**1.2 J**	< 19	< 19	< 1.9	< 38
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19 *	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Chrysene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.046	< 0.048	< 0.043	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 0.96	< 0.043	< 0.48	< 19	< 19	< 1.9	< 38
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**0.45**	**0.32**	< 0.10	**0.52**	< 20	< 20	< 2.1	**0.28**	< 1.1	< 19	< 19	< 1.9	< 38
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**6.5**	**4.4**	< 0.10	**5.1**	< 20	< 20	**31 D**	**2.6**	**12**	< 19	**21**	**14**	**16 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.067**	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Naphthalene	20	µg/L	< 0.5	< 0.50	<0.50	**1.6**	< 0.20	**0.59**	**0.24**	**0.52**	**0.099 J**	**0.44**	< 0.19	< 0.19	**0.096 J**	**810**	**290**	**1.1**	**830**	**610**	**300**	**2,700 D**	< 0.095	**750**	**320**	**2,900**	**1,100 B**	**2,400 B**
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**7.9**	**5.2**	< 0.050	**6.3**	< 20	< 20	**34 D**	**3.5**	**11**	< 19	**21**	**14**	**17 J**
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**0.52**	**0.35**	< 0.050	**0.49**	< 20	< 20	< 2.1	**0.30**	< 1.1	< 19	< 19	< 1.9	< 38
Inorganic Compounds																												
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010
Barium	2	mg/L	**0.614**	**0.566**	**0.708**	**0.650**	**0.68**	**0.72**	**0.68**	**0.77**	**0.66**	**0.66**	**0.27**	**0.64**	**1.3**	**0.128**	**0.419**	**0.0262**	**0.157**	**0.26**	**0.30**	**0.25**	**0.082**	**0.38**	**0.27**	**0.75**	**0.6**	**0.95**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00025 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	**0.0058**	**0.0091**	**0.0053**	**0.0062**	**0.0033 J**	**0.0081**	**0.0029 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	**0.0137**	**0.0216**	**0.0179**	**0.0101**	< 0.010	< 0.010	**0.0017J**	**0.0031 J**	**0.0021 J**	**0.0013 J**	< 0.010	< 0.010	**0.0064 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0012 J**	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0021 J**	**0.0024 J**	**0.0044 JB**	< 0.020	< 0.020	< 0.020	**0.0038 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0030 J**	**0.0043 JB**	< 0.020	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0056 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0054 J**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0055 J**	**0.0055 J**	**0.0065 J**	**0.0066 J**	< 0.040	< 0.040	**0.0035 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0038 J**	**0.0048 J**	**0.0046 J**	**0.0052 J**	< 0.040	< 0.040	**0.0038 J**
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0086 J**	**0.0067 J**	**0.0068 J**	**0.0045 J**	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0029 J**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.109**	**0.0395**	**0.258**	**0.183**	**0.12**	**0.11**	**0.072**	**0.17**	**0.087**	**0.019 J**	**0.023**	**0.021**	**0.017 J**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
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H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
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Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-510BR													MW-511BR													
		Sample Date	1/14/2015	7/16/2014	1/9/2014	7/11/2013	07/13 DUP	1/10/2013	7/24/2012	1/23/2012	7/6/2011	1/19/2011	7/20/2010	1/11/2010	7/29/2009	1/19/2009	1/14/2015	7/15/2014	7/14 DUP	1/9/2014	7/11/2013	1/10/2013	7/26/2012	1/25/2012	7/6/2011	1/20/2011	7/20/2010	1/12/2010	7/29/2009	1/19/2009	01/09 DUP
		Unit	During Extraction														During Extraction													
Volatile Organic Compounds																														
Acetone	4,000	µg/L	< 50	< 50	<50	< 2,500	< 2,500	< 500	< 10,000	< 100	< 100	< 100	**19 J**	< 200	< 10000	< 20000	< 50	< 50	< 50	<50	**85**	< 2,000	< 2,000	< 250	560 J	< 250	**350**	< 10000	< 10000	< 10000	< 10000
Benzene	5	µg/L	**1,100**	**25**	**32**	**22,000**	**6,300**	**370**	**7,800**	**5,400**	**1,500**	**2,100**	**2300**	**96**	**4400**	**35000**	**450**	**670**	**590**	**2,500**	**1,200**	**3,400**	**1,900**	**4,000**	**3,600**	**6,100**	**3600**	**8,800**	**10,000**	**8,700**	**10,000**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	<5.0	< 250	< 250	< 25	< 500	< 12	< 12	< 12	< 10	<10	< 500	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 30	< 30	< 30	< 5.0	< 500	< 500	160 J	99 J
Ethylbenzene	700	µg/L	**180**	**20**	**47**	**1,200**	**310**	**160**	**1200**	**590**	**230**	**630**	**660**	<10	< 500	**760 J**	**17**	**55**	**59**	**180**	**150**	**200**	**120**	**220 J**	**190 J**	**420**	**200**	**710**	**830**	**870**	**1,000**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	<5.0	< 250	< 250	< 25	< 500	< 20	< 20	< 20	< 10	**50**	< 500	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 50	< 50	< 50	< 5.0	< 500	< 500	< 500	< 500
Toluene	1,000	µg/L	**190**	**30**	**52**	**10,000**	**2,900**	**350**	**4,700**	**2,600**	**1,100**	**1,200**	**1500**	**160**	**5500**	**19000**	**35**	**75**	**88**	**850**	**410**	**1,100**	**630**	**1,200**	**1,000**	**1,800**	**1200**	**2,300**	**2,500**	**1,200**	**1,400**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	<5.0	< 250	< 250	< 25	< 500	< 2.6	< 2.6	< 2.6	< 10	< 10	< 500	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 6.5	< 6.5	< 6.5	< 5.0	< 500	< 500	< 500	< 500
Xylenes, total	2,000	µg/L	**200**	**24**	**66**	**690**	**690**	**230**	**1,500**	**930**	**520**	**1,100**	**940**	**360**	**3500**	**5200**	**12**	**35**	**40**	**250**	**190**	**280**	**160**	**350**	**310**	**650**	**400**	**940**	**1000**	**810**	**900**
Semivolatile Organic Compounds																														
Acenaphthene	2,000	µg/L	**7.8**	< 0.50	**4.8**	**53**	**15**	**21**	< 190	**39**	**120**	**37**	**16**	**9.3**	**11 ***	**12 J**	**3.3**	**1.8**	**1.8**	**3.5**	**5.2**	**5.0**	**4.6**	**8.4**	**4.2**	**16**	**6.1**	**9.1**	**21 ***	**31 J***	**23 J***
Acenaphthylene	10	µg/L	**2.7**	< 1.0	<1.0	< 100	**5.1**	< 19	< 190	**110**	**670**	**32**	**170**	**120**	**170**	**150**	< 1	< 1.0	< 1.0	**1.1**	**1.3**	< 2.1	< 4.3	**2.6**	**0.98 J**	**8.7**	**4.0**	**5.9**	**11**	**5.5 J***	**5.0 J***
Anthracene	10	µg/L	**0.86**	**0.31**	**0.78**	**5.8**	**3.0**	< 19	< 190	< 11	**220**	< 9.6	**24**	**8.5**	< 9.7	< 94	**0.081**	**0.081**	**0.097**	**0.42**	**0.35**	< 2.1	< 4.3	< 1.0	< 0.94	**1.3 J**	< 1.9	< 1.9	< 3.9	< 38 *	< 38 *
Benz(a)anthracene	0.1	µg/L	**0.17**	**0.11**	**0.12**	**0.76**	**1.2**	< 19	< 190	< 11	**190**	< 9.6	**13**	**5.1**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(a)pyrene	0.2	µg/L	**0.13**	**0.096**	**0.07**	**0.52**	**1.1**	< 19	< 190	< 11	**160**	< 9.6	**11**	**4**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(b)fluoranthene	0.2	µg/L	**0.13**	< 0.10	<0.010	**0.42**	**0.89**	< 19	< 190	< 11	< 5.1	< 9.6	**4.4**	**1.7**	< 9.7	< 94	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 2.1	< 4.3	< 1.0 *	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	<0.10	**0.18**	**0.58**	< 19	< 190	< 11	**54**	< 9.6	**3.8**	**1.5**	< 9.7	< 94	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	<0.050	**0.16**	**0.36**	< 19	< 190	< 11	**110**	< 9.6	**7.1**	**2.2**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38 *	< 38 *
Chrysene	0.2	µg/L	**0.14**	**0.095**	**0.081**	**0.68**	**1.0**	< 19	< 190	< 5.1	**140**	< 4.3	**11**	**3.6**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 0.47	< 0.42	< 0.45	< 1.9	< 1.9	< 3.9	< 38	< 38
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	**0.10**	< 19	< 190	< 11	**16**	< 9.6	< 1.9	**0.46**	< 9.7	< 94	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Fluoranthene	1,000	µg/L	**0.78**	**0.44**	**0.81**	**4.0**	**3.1**	< 19	< 190	< 11	**330**	< 9.6	**26**	**10**	< 9.7	< 94	< 0.1	< 0.10	< 0.10	**0.15**	**0.17**	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38 *	< 38 *
Fluorene	1,000	µg/L	**4.7**	**0.61**	**4.7**	**42**	**14**	< 19	< 190	**39**	**590**	**30**	**67**	**43**	**44**	**31 J**	**0.89**	**0.84**	**0.83**	**2.3**	**3.5**	**3.9**	**4.4**	**7.0**	**3.7**	**13**	**5.0**	**4.2**	**7.8**	**6.8 J***	< 38 *
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.058**	< 0.050	<0.050	**0.15**	**0.45**	< 19	< 190	< 11	**50**	< 9.6	**4.1**	**1.8**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Naphthalene	20	µg/L	**300**	**0.64**	<0.50	**2,400**	**0.65**	**680**	**3,600**	**4,700 D**	**6,000**	**3,700**	**1400**	**2100**	**6600 B**	**6900**	**150**	**75**	**85**	**390**	**260**	**180**	**120**	**310 D**	**26**	**12,000**	**490**	**1,700**	**2,600 B**	**1,800**	**1,300**
Phenanthrene	10	µg/L	**5.6**	**0.66**	**0.96**	**47**	**17**	< 19	< 190	**37**	**1,000**	**27**	**120**	**56**	**41**	**32 J**	**0.76**	**0.7**	**0.73**	**2.5**	**2.3**	**3.4**	< 4.3	**7.6**	**5.0**	**12 ***	**6.4**	**3.8**	**5.9**	< 38 *	< 38 *
Pyrene	1,000	µg/L	**0.97**	**0.45**	**0.89**	**4.4**	**3.9**	< 19	< 190	< 11	**530**	< 9.6	**44**	**12**	**11**	< 94	**0.055**	**0.051**	**0.054**	**0.15**	**0.19**	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Inorganic Compounds																														
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010
Barium	2	mg/L	**0.109**	**0.0515**	<0.0200	**0.326**	**0.130**	**0.049**	**0.29**	**0.28**	**0.23**	**0.22**	**0.22**	**0.067**	**0.14**	**0.17**	**0.0678**	**0.0609**	**0.0598**	**0.256**	**0.268**	**0.30**	**0.33**	**0.41**	**0.40**	**0.47**	**0.52**	**0.56**	**0.26**	**0.15**	**0.14**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.005	< 0.0050	**0.0089**	**0.0063**	**0.0298**	**0.0062**	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0019 J**	**0.0012 J**	< 0.010	< 0.010	**0.0047 J**	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0012 J**	**0.0016 J**	< 0.0012	**0.0014 J**	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0026 J**	< 0.0019	**0.0044 JB**	**0.0020 J**	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0037 JB**	**0.0030 J**	< 0.020	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.01	**0.012**	< 0.010	< 0.010	**0.014**	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0052 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.013 J**	**0.0012 J**	**0.0094 J**	**0.011 J**	< 0.040	< 0.040	**0.0046 J**	**0.0055 J**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0030 J**	< 0.0024	**0.0030 J**	< 0.010	< 0.010	< 0.010	**0.0040 J**	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0939**	**0.0623**	**0.165**	**0.124**	**0.573**	**0.14**	**0.028**	**0.015 J**	**0.016 J**	**0.11**	**0.13**	<0.020	**0.12**	**0.012 J**	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	0.028	< 0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-512BR														MW-513BR								
		Sample Date	1/14/2015	7/17/2014	1/14/2014	7/11/2013	1/10/2013	7/26/2012	1/25/2012	7/7/2011	1/20/2011	07/10 DUP	7/20/2010	1/12/2010	7/29/2009	1/19/2009	1/14/2015	7/16/2014	1/8/2014	7/11/2013	1/9/2013	7/24/2012	2/6/2012	7/7/2011	1/18/2011
		Unit	During Extraction														During Extraction								
Volatile Organic Compounds																									
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 500	< 500	< 5.0	< 5.0	< 5.0	**44 J**	**52 J**	< 2000	< 2000	< 2000	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0
Benzene	5	µg/L	< 5.0	**12**	**5.2**	**85**	**150**	**1,300 D**	**40**	**1,500**	**63**	**200**	**200**	**3,500**	**1,900**	**2,300**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.1 J**	**0.49 J**	**30**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 0.60	< 0.60	< 0.60	< 10	< 10	< 100	< 100	18 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**8.4**	< 25	**8.4**	**20**	**1.8 J**	**24**	**24**	**560**	**250**	**250**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.25 J**	< 0.11	**3.0 J**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 1.0	< 1.0	< 1.0	< 10	< 10	< 100	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 0.33	**3.4 J**	< 0.33	**1.0 J**	**0.91 J**	< 100	< 100	**130**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 0.13	< 0.13	< 0.13	< 10	< 10	< 100	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.31 J**	< 0.13	**0.35 J**
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	**1.4 J**	**34**	**3.3 J**	**7.5 J**	**7.3 J**	**200**	**110**	**160**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.33 J**	< 0.20	**1.4 J**
Semivolatile Organic Compounds																									
Acenaphthene	2,000	µg/L	**2.5**	**3**	**0.95**	**1.7**	**1.2**	< 19	**2.4**	**12**	**2.4**	**0.77**	**1.7**	**26**	**10 ***	**6.8 J***	**1.3**	**1.8**	< 0.50	**2.4**	**2.5**	**2.9**	**6.9**	**0.16 J**	**4.1**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 19	**0.16 J**	< 0.99	**0.39**	**0.13 J**	**0.55**	**2.7**	**3.5**	**4.0 J***	< 1	< 1.0	< 1.0	< 1.0	< 0.20	< 0.20	**0.16 J**	< 0.097	< 0.095
Anthracene	10	µg/L	**0.051**	**0.088**	**0.072**	**0.066**	< 0.19	< 19	**0.11 J**	< 0.99	< 0.096	< 0.19	**0.11 J**	< 1.9	< 0.94	< 19 *	**0.082**	**0.068**	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	< 0.11 *	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19 *	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.049	< 0.44	< 0.043	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.049	< 0.043	< 0.043
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	**0.14 J**	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19 *	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Fluorene	1,000	µg/L	**0.28**	**0.37**	**0.22**	**0.30**	< 0.19	< 19	**0.57**	**2.7**	**0.41**	**0.41**	**0.79**	**5.2**	**3.1**	< 19 *	< 0.10	< 0.10	< 0.10	**0.19**	< 0.20	< 0.20	**0.40**	< 0.097	**0.28**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.081**	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Naphthalene	20	µg/L	< 0.50	**3.7**	<0.50	**7.4**	**15**	**320**	**0.84**	**320**	**12**	< 0.19	< 0.19	**810**	**370 B**	**350**	< 0.5	< 0.50	< 0.50	**1.9**	**2.6**	< 0.20	**2.2**	**0.30**	**4.4**
Phenanthrene	10	µg/L	< 0.050	**0.27**	**0.44**	**0.41**	< 0.19	< 19	**0.71**	**1.6 J**	**0.23 ***	**0.56**	**0.82**	**4.9**	**3.0**	< 19 *	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Pyrene	1,000	µg/L	< 0.050	< 0.050	**0.11**	**0.075**	< 0.19	< 19	**0.18 J**	< 0.99	< 0.096	< 0.19	**0.11 J**	< 1.9	< 0.94	< 19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	**0.11 J**	< 0.097	< 0.095
Inorganic Compounds																									
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046
Barium	2	mg/L	**0.154**	**0.192**	**0.256**	**0.171**	**0.13**	**0.23**	**0.13**	**0.24**	**0.11**	**0.062**	**0.064**	**0.15**	**0.079**	**0.22**	**0.711**	**0.635**	**0.115**	**0.749**	**0.72**	**0.79**	**0.74**	**0.15**	**0.61**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0025 J**	**0.0013 J**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0027 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0068 J**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0028 J**	< 0.0023
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	**0.0108**	< 0.0100	< 0.010	< 0.010	< 0.0024	**0.012**	< 0.0024
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.0095 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0224**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.030**	< 0.0087

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Summary of Historical Groundwater Sampling Data – Decommissioned Monitoring Wells

Appendix E3

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	CP-01				MW-04																
		Sample Date	1/18/2002	1/18/2002	7/12/2001	1/17/2001	01/13/2009	7/15/2008	1/10/2008	8/21/2007**	7/11/2007	2/13/2007	7/11/2006	1/15/2006	7/21/2005	7/16/2004	1/22/2004	7/20/2003	7/03 DUP	1/20/2003	7/9/2002	1/17/2002	7/11/2001	1/18/2001
		Unit	Pre-ISCO				Post-ISCO								Pre-ISCO									
Volatile Organic Compounds																								
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 UJ	< 100 U	< 100	< 50	< 50	--	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**17 J**	25 U
Benzene	0.005	mg/L	**0.0014**	**0.0013**	**0.0087**	**0.0037**	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.21 J**	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.29 J**	5.0 U
Ethylbenzene	0.7	mg/L	**0.00024 J**	**0.00024 J**	**0.00036 J**	0.00041 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1	mg/L	**0.00028 J**	**0.00029 J**	**0.00033 J**	**0.00032 J**	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.48 J**	1.0 U	1.0 U	1.0 U
Xylenes, total	2	mg/L	**0.0026**	**0.003**	**0.0038**	**0.0042**	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																								
2-Methylnaphthalene	*	mg/L	**0.078 J**	**0.072 J**	**0.066**	**0.11**	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2	mg/L	**0.056**	**0.055**	**0.064**	**0.086**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	0.0002	mg/L	**0.0021 J**	**0.0022 J**	**0.0018 J**	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	**0.00037 J**	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.10	--	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	DL	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	DL	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.10	--	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	0.001	mg/L	**0.0069 J**	**0.0072 J**	**0.0073 J**	**0.012**	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1	mg/L	**0.0016 J**	**0.0019 J**	**0.002 J**	**0.005 J**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1	mg/L	**0.019**	**0.018**	**0.02**	**0.032**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	**0.0013 J**	0.01 U	0.027 J	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	mg/L	**0.018**	**0.017**	**0.02**	**0.028**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1	mg/L	**0.0013 J**	**0.0017 J**	**0.0027 J**	**0.0038 J**	0.022 J	0.095 J	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																								
Aluminum (fume or dust)	*	mg/L	0.041 U	0.035 U	0.2 U	**0.13 J**	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.37**	0.2 U	**0.034 B**	**0.059 B**	**0.093 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	< 0.020 U	< 0.020	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0057 B**
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	**0.0069 J**	< 0.010 U	< 0.010	<0.0500	--	<0.050	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0045 B**	**0.0053 B**	0.01 U
Barium	2	mg/L	**0.32**	**0.32**	**0.27**	**0.32**	0.038	**0.14**	**0.0428**	--	**0.0727**	**0.0479**	**0.0509**	0.2 U	**0.0907**	**0.13**	**0.077**	**0.07**	**0.07**	**0.084**	**0.073**	**0.091**	**0.1**	**0.12**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.00072 U	< 0.0040 U	< 0.0040	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00073 B**	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	< 0.0050 U	< 0.0050	< 0.0050	--	< 0.0050	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**170**	**170**	**140**	**160**	--	--	--	--	--	--	--	**9.98**	**8.04**	**34**	**17**	**17**	**18**	**16**	**17**	**19**	**18**	**20**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.010 U	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	**0.0014 J**	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.0015 U	0.0017 U	0.02 U	**0.0068 J**	0.0026 J	0.0022 J	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0021 B**	0.02 U	0.02 U	0.02 UN	**0.00096 B**
Cyanide	0.2	mg/L	**0.27**	**0.32**	**0.16**	**0.33**	< 0.010 U	0.0067 J	< 0.010	--	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	**0.019**	0.01 U	0.015 U	0.015 U	0.01 U	**0.0055 J**	**0.0076 B**	**0.0082 B**	**0.0057 B**
Iron	*	mg/L	**12**	**12**	**11**	**15**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	0.005 U	0.0024 U	0.005 U	0.0045 U	< 0.0050 U	< 0.0050	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0016 B**	0.005 U	0.005 U	**0.0018 B**	0.005 U
Magnesium	*	mg/L	**19**	**19**	**15**	**18**	--	--	--	--	--	--	--	5 U	**2.54**	**6.1**	**2.1**	**2.4**	**2.5**	**1.9**	**1.6**	**2**	**1.8**	**2.1**
Manganese	*	mg/L	**0.86**	**0.86**	**0.74**	**0.88**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00012 J	< 0.00020	< 0.00020	--	< 0.00020	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000098 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	< 0.040 U	< 0.040	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**7.4**	**7.5**	**7.1**	**7.9**	--	--	--	--	--	--	--	5 U	**1.75**	**5.8**	**4.3**	**4.1**	**4.4**	**3.9**	**4.2**	**4.5 N**	**5.9**	**4.0**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.010 U	< 0.010	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**8.7**	**9.1**	**7.9**	**9.4**	--	--	--	--	--	--	--	**12.6**	**12.9**	**5**	**2.5**	**4.9**	**5**	**3.6**	**2.5**	**2.9**	**3.4**	**3.8**
Thallium	0.002	mg/L	0.002 UW	0.002 UJ	0.002 UW	0.002 U	< 0.0010 U	< 0.0010	< 1.00	--	< 1.00	< 0.01	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UWN	0.002 UJ	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.010 U	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.008 U	0.013 J	**0.061**	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.03**	**0.0091 B**	**0.0065 J**	**0.011 B**	**0.014 B**	**0.021**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-06			MW-07							MW-08				MW-09			MW-10		
		Sample Date	1/21/2002	7/12/2001	1/23/2001	4/4/2002	3/8/2002	3/8/2002	1/21/2002	7/12/2001	7/12/2001	1/16/2001	4/4/2002	1/22/2002	7/16/2001	1/16/2001	1/22/2002	7/16/2001	1/23/2001	1/21/2002	7/12/2001	1/17/2001
		Unit	Pre-ISCO			Pre-ISCO							Pre-ISCO				Pre-ISCO			Pre-ISCO		
Volatile Organic Compounds																						
Acetone	4	mg/L	2.5 U	5 U	0.25 U	--	--	0.025 U	0.12 U	**0.016 J**	**0.019 J**	0.025 UJ	--	2.5 U	2.5 U	0.62 U	5 U	**0.085 J**	0.025 U	**0.024 J**	0.025 U	0.025 U
Benzene	0.005	mg/L	**21 D**	**15**	**18 D**	**0.012**	--	**0.00042 J**	**1.8 D**	**0.75 D**	**0.62 D**	**0.15**	**11**	**25 D**	**15**	**17 D**	**23**	**23 D**	**2.4 D**	**0.68 D**	**1.1 D**	**0.0024**
Carbon Disulfide	4	mg/L	0.1 U	0.2 U	0.01 U	--	--	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	--	0.1 U	0.1 U	0.025 U	0.2 U	0.005 U	0.001 U	0.001 U	0.001 U	**0.0028**
Dichloromethane	0.005	mg/L	0.5 U	1 U	0.05 U	0.005 U	--	0.005 U	0.025 U	0.005 U	0.005 U	0.005 U	0.5 U	0.5 U	0.5 U	0.12 U	1 U	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	**4.8**	**4.5**	**5.5 D**	**0.00065 J**	--	0.001 U	**0.56**	**0.3 D**	**0.24 D**	**0.07**	**2.3**	**4.5**	**3.8**	**4.7**	**3.9**	**3.5 D**	**1.2 D**	**0.0019**	**0.017**	**0.00012 J**
Toluene	1	mg/L	**3.7**	**3.3**	**6.4 D**	**0.0024**	--	0.001 U	**0.17**	**0.062**	**0.066**	**0.017**	**0.58**	**2.8**	**0.56**	**2.3**	**11**	**16 D**	**0.54 D**	0.001 U	**0.00054 J**	0.001 U
Trichloroethylene	0.005	mg/L	0.1 U	0.2 U	0.01 U	0.001 U	--	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	**0.085 J**	0.1 U	0.1 U	0.025 U	0.2 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	**3.7**	**3.7**	**4.5**	--	--	0.002 U	**0.39**	**0.15**	**0.16**	**0.062**	--	**3.6**	**3.2**	**4.4**	**3.7**	**5.8 D**	**0.73 D**	**0.0083**	**0.015**	**0.0033**
Semivolatile Organic Compounds																						
2-Methylnaphthalene	*	mg/L	**0.67 D**	**0.77**	**1**	--	--	**0.0011 J**	**0.11**	**0.035**	**0.038**	**0.019**	--	**0.66**	**0.53**	**0.61**	**0.77**	**0.86**	**0.58**	**0.056**	**0.062**	**0.03**
Acenaphthene	2	mg/L	**0.072**	**0.11 J**	**0.1**	**0.0088 J**	--	**0.0012 J**	**0.029 J**	**0.021**	**0.022**	**0.016**	**0.12**	**0.12**	**0.1**	**0.11**	**0.039 J**	**0.075**	**0.063**	**0.052**	**0.068**	**0.048**
Acenaphthylene	0.0002	mg/L	**0.057**	**0.085 J**	**0.18**	**0.007 J**	--	**0.0015 J**	**0.046 J**	**0.031**	**0.032**	**0.018**	**0.0067 J**	**0.0087 J**	**0.0032 J**	**0.011 J**	**0.14**	**0.14**	**0.057**	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	**0.0045 J**	0.5 U	**0.0069 J**	**0.00062 J**	--	**0.00055 J**	0.1 U	**0.0022 J**	**0.0027 J**	**0.0014 J**	**0.0044 J**	**0.0036 J**	**0.0047 J**	**0.0043 J**	**0.0054 J**	**0.0082 J**	**0.0043 J**	**0.00041 J**	**0.00052 J**	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.022 J**	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.023 J**	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.032 J**	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.0086 J**	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.026 J**	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	**0.0045 J**	0.1 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	**0.0048 J**	0.1 U	0.05 U	**0.009 J**	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	**0.0049 J**	0.5 U	**0.011 J**	--	--	0.01 U	**0.0033 J**	**0.0023 J**	**0.0025 J**	**0.0017 J**	--	**0.0066 J**	0.05 U	**0.0055 J**	**0.0088 J**	**0.0098 J**	**0.0086 J**	**0.00078 J**	**0.00086 J**	0.01 U
Fluoranthene	1	mg/L	**0.0016 J**	0.5 U	**0.0024 J**	0.01 U	--	0.01 U	0.1 U	**0.00094 J**	**0.001 J**	**0.00076 J**	**0.0019 J**	0.1 U	**0.002 J**	**0.0019 J**	**0.0039 J**	**0.0047 J**	**0.0017 J**	0.01 U	0.01 U	0.01 U
Fluorene	1	mg/L	**0.02**	**0.029 J**	**0.048 J**	**0.0047 J**	--	**0.00052 J**	**0.013 J**	**0.011**	**0.012**	**0.0077 J**	**0.026 J**	**0.028 J**	**0.027 J**	**0.027 J**	**0.031 J**	**0.043 J**	**0.039 J**	**0.006 J**	**0.0076 J**	**0.0046 J**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.0083 J**	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	**7.4 D**	**12**	**9.5 D**	**0.11**	--	**0.0059 J**	**1.7**	**0.66 D**	**0.72 D**	**0.19**	**4 D**	**7 D**	**4.1 D**	**7 D**	**7 D**	**6.8 D**	**3.4 D**	**0.039**	**0.11**	**0.068**
Phenanthrene	*	mg/L	**0.026**	**0.026 J**	**0.04 J**	**0.0027 J**	--	**0.00071 J**	**0.0093 J**	**0.009 J**	**0.0091 J**	**0.0044 J**	**0.026 J**	**0.026 J**	**0.024 J**	**0.027 J**	**0.032 J**	**0.033 J**	**0.027 J**	**0.0022 J**	**0.0026 J**	**0.0012 J**
Pyrene	1	mg/L	**0.0019 J**	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	**0.0019 J**	**0.0022 J**	**0.001 J**	**0.0028 J**	0.1 U	**0.0033 J**	**0.003 J**	**0.0055 J**	**0.0082 J**	0.05 U	0.01 U	0.01 U	0.01 U
Inorganic Compounds																						
Aluminum (fume or dust)	*	mg/L	0.2 U	**0.04 B**	**0.04 B**	--	--	--	0.2 U	0.2 U	0.2 U	**0.086 B**	--	0.2 U	**0.057 B**	0.2 U	0.2 U	**1.0**	**0.57**	0.2 U	0.2 U	**0.12 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	--	--	--	0.02 U	0.02 U	0.02 U	**0.0060 B**	--	0.02 U	0.02 U	**0.0065 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0034 B**	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.48**	**0.39**	**0.38**	--	--	--	**0.18**	**0.09**	**0.085**	**0.059**	--	**1**	**0.87**	**0.92**	**0.45**	**0.48**	**0.31**	**0.45**	**0.45**	**0.46**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	--	--	--	0.004 U	0.004 U	0.004 U	**0.0023 B**	--	0.004 U	0.004 U	**0.0023 B**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0022 B**
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	--	--	--	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	**0.00075 B**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**79**	**77**	**72**	--	--	--	**120**	**95**	**90**	**87**	--	**33**	**27**	**28**	**73**	**74**	**57**	**21**	**20**	**20**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	**0.0066 B**	**0.0053 B**	**0.0042 B**	**0.0073 B**	--	**0.018**	**0.016**	**0.015**	**0.0021 B**	**0.0017 B**	0.01 U	**0.0069 B**	**0.0084 B**	**0.0085 B**
Copper	1.3	mg/L	**0.00096 B**	0.02 U	0.02 U	--	--	--	**0.003 B**	**0.0034 B**	**0.0032 B**	**0.0051 B**	--	**0.0011 B**	0.02 U	0.02 U	0.02 U	**0.0029 B**	**0.0035 B**	**0.0014 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	**0.048**	**0.034**	**0.029**	--	**4.1**	**10**	**1.9**	**1.5**	**1.7**	**2.9**	--	**0.036**	**0.043**	**0.046**	**0.037**	**0.038**	**0.036**	**0.011**	**0.0096 B**	**0.017**
Iron	*	mg/L	**9.8**	**9.8**	**9.3**	--	--	--	**6.4**	**5.0**	**4.5**	**3.8**	--	**110**	**93**	**98**	**21**	**23**	**12**	**75**	**83**	**84**
Lead	0.015	mg/L	0.005 U	0.005 U	0.005 U	--	--	--	0.005 U	0.005 U	0.005 U	**0.0021 B**	--	0.005 U	0.005 U	**0.002 B**	0.005 U	0.005 U	**0.0019 B**	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**69**	**71**	**64**	--	--	--	**9.7**	**6.7**	**6.4**	**5.7**	--	**36**	**29**	**31**	**36**	**35**	**18**	**20**	**19**	**19**
Manganese	*	mg/L	**2.6**	**2.7**	**2.6**	--	--	--	**1.2**	**0.63**	**0.59**	**0.3**	--	**5.4**	**4.6**	**4.9**	**1.2**	**1.5**	**0.56**	**1.6**	**1.7**	**1.8**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.00020 U	--	--	--	0.0002 U	0.0002 U	0.0002 U	0.00020 U	--	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	--	--	--	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**1.8**	**1.7**	**1.7**	--	--	--	**6.8**	**5.7**	**5.4**	**4.3**	--	**3.2**	**2.7**	**3.2**	**9.1**	**8.6**	**5.1**	**2.8**	**2.6**	**3.2**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**59**	**58**	**58**	--	--	--	**14**	**7.9**	**7.5**	**6.2**	--	**30**	**32**	**31**	**19**	**20**	**10**	**59**	**57**	**51**
Thallium	0.002	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	0.002 U	0.002 U	0.002 U	0.002 U	--	0.002 U	0.002 U	0.002 UW	0.002 U	0.002 U	0.002 UW	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0034 B**	0.01 U	**0.0025 B**	0.01 U	0.01 U	0.01 U	**0.0027 B**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	--	--	--	**0.0066 B**	0.02 U	0.02 U	0.02 U	--	**0.012 B**	0.02 U	0.02 U	**0.0064 B**	**0.073**	**0.039**	**0.008 B**	0.02 U	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-11																									
		Sample Date	1/16/2012	7/5/2011	1/17/2011	7/13/2010	1/5/2010	7/21/2009	1/13/2009	7/15/2008	1/10/2008	8/21/2007**	7/11/2007	2/14/2007	7/11/2006	1/10/2006	7/21/2005	1/18/2005	7/16/2004	1/22/2004	7/18/2003	1/20/2003	7/9/2002	7/9/2002	4/3/2002	1/17/2002	7/11/2001	1/24/2001
		Unit	Post ISCO														Pre-ISCO											
Volatile Organic Compounds																												
Acetone	4	µg/L	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	--	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	**140**	25 U	25 U	--	25 U	**20 J**	25 U
Benzene	0.005	µg/L	< 0.25	< 0.25	**0.29 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.39 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**	1.0 U
Carbon Disulfide	4	µg/L	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**10**	1.0 U	1.0 U	--	1.0 U	**0.79 J**	1.0 U
Ethylbenzene	0.7	µg/L	< 0.11	< 0.11	**0.12 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.13 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	0.005	µg/L	< 1.0	**3.5 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.38 J**	5.0 U	5.0 U	5.0 U	5.0 U	**1.1 JB**
Toluene	1	µg/L	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.32 J**	**0.47 J**	**0.36 J**	1.0 U	**0.39 J**	**0.44 J**	1.0 U
Trichloroethylene	0.005	µg/L	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.83 J**	1.0 U
Xylenes, total	2	µg/L	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.14 JB**	2.0 U	2.0 U	--	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	**0.23**	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	**0.06**	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.045	< 0.056	< 0.044	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	**0.18**	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.099	< 0.12	**0.41**	< 0.19	0.21	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	**0.018 J**	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.16 J**	**0.079 B**	--	0.2 U	0.2 U	**0.49**
Antimony	0.01	mg/L	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0046	< 0.0046	**0.0090 J**	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0053 B**	--	**0.0086 B**	0.01 U	**0.0067 B**
Barium	2	mg/L	**0.83**	**0.81**	**1.5**	0.82	1	1	**0.68**	**0.81**	**0.648**	--	**0.779**	**0.754**	**0.933**	**0.779**	**1.05**	**0.92**	**1.1**	**0.62**	**0.73**	**0.47**	**0.68**	**0.65**	--	**0.58**	**0.64**	**1.7**
Beryllium	0.004	mg/L	< 0.00020	**0.00020 J**	**0.00027 J**	**0.00020 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	**0.00085 B**	**0.00057 B**	0.004 U
Cadmium	0.005	mg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.02**	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**24.1**	**26.5**	**26**	**30**	**20**	**21**	**15**	**20**	**20**	--	**19**	**18**	**42**
Chromium	0.1	mg/L	**0.0015 J**	**0.0016 J**	**0.0072 J**	< 0.010	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0261**	**0.0271**	**0.032**	**0.036**	**0.019**	**0.02**	**0.016**	**0.025**	**0.024**	--	**0.023**	**0.02**	**0.053**
Copper	1.3	mg/L	< 0.0019	< 0.0019	**0.0058 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0011 B**	0.02 U	0.02 U	--	0.02 U	**0.0011 BN**	0.02 U
Cyanide	0.2	mg/L	< 0.0050	**0.021**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.01**	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**17.6**	**17.2**	**18**	**20**	**17**	**18**	**15**	**17**	**17**	--	**17**	**16**	**25**
Mercury	0.002	mg/L	< 0.000091	< 0.000091	< 0.000091	<0.00020	<0.00020	0.00022	**0.000081 J**	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00012 B**	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.013 J**	**0.011 J**	**0.014 J**	**0.013 J**	< 0.040	< 0.040	**0.0087 J**	**0.011 J**	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0048 B**	**0.0097 J**	**0.0095 B**	--	**0.012 B**	**0.019 B**	**0.0095 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.45**	**2.8**	**3.1**	**2.1**	**2.1**	**1.6**	**2.1**	**2**	--	**2 N**	**2.0**	**3.6**
Selenium	0.05	mg/L	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0045 J**	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**36.4**	**37.2**	**37**	**41**	**22**	**38**	**42**	**41**	**41**	--	**37**	**43**	**44**
Thallium	0.002	mg/L	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UJ	0.002 UWN	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0024	< 0.0024	**0.0063 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.0031 U	**0.0023 B**	--	**0.0039 B**	**0.0025 B**	0.01 U
Zinc	2	mg/L	< 0.0087	< 0.0087	**0.013 J**	< 0.020	< 0.020	< 0.020	**0.0098 J**	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.04**	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-13						MW-14		MW-15		MW-18																				
		Sample Date	3/8/2002	3/8/2002	1/22/2002	7/17/2001	1/23/2001	1/23/2001	3/8/2002	3/8/2002	7/18/2001	1/24/2001	7/22/2009	01/13/2009	07/17/2008	1/9/2008	8/21/07***	7/12/2007	2/13/2007	7/12/2006	1/10/2006	7/20/2005	7/12/2004	2/10/2004	7/15/2003	1/17/2003	7/11/2002	1/18/2002	7/12/2001	1/17/2001
		Unit	Pre-ISCO						Pre-ISCO		Pre-ISCO		Post-ISCO									Pre-ISCO								
Volatile Organic Compounds																																	
Acetone	4	mg/L	--	0.5 U	5 U	0.62 U	0.25 U	2.5 U	10 U	--	**0.025 R**	**0.013 J**	< 100 U	< 100 U	< 100	< 50	--	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	0.005	mg/L	--	**1.9**	**30**	**19 D**	**9.3 D**	**9.6**	**34**	--	**0.00048 J**	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.22 J**	**0.33 J**
Carbon Disulfide	4	mg/L	--	0.02 U	0.2 U	0.025 U	0.01 U	0.1 U	0.4 U	--	0.00039 U	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	0.005	mg/L	--	0.1 U	1 U	0.12 U	0.05 U	0.5 U	2 U	--	0.005 U	**0.00045 J**	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.55 JB**
Ethylbenzene	0.7	mg/L	--	**0.65**	**4.9**	**4.4**	**2.8 D**	**2.4**	**19**	--	0.001 U	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.24 J**	1.0 U
Toluene	1	mg/L	--	**0.64**	**11**	**2.2**	**2.5 D**	**2.1**	**0.31 J**	--	**0.00037 J**	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	0.005	mg/L	--	0.02 U	0.2 U	0.025 U	0.01 U	0.1 U	0.4 U	--	**0.00031 J**	0.001 U	**6.7**	**5.3**	5.0 J	**11**	--	**11**	**6.9**	5 U	**1.6**	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	**0.67 J**	1.0 U	1.0 U	1.0 U
Xylenes, total	2	mg/L	--	**0.83**	**3.7**	**2.8**	**2.6**	**2.1**	**49**	--	**0.0014 J**	**0.00023 J**	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.6 J**	2.0 U
Semivolatile Organic Compounds																																	
2-Methylnaphthalene	*	mg/L	--	**0.24 D**	**0.58**	**0.57**	**0.7**	**0.75**	**36 D**	--	**0.00054 J**	**0.003 J**	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2	mg/L	--	**0.038**	**0.11**	**0.12**	**0.097**	**0.1**	**4.6**	--	**0.015**	**0.018**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	0.0002	mg/L	--	**0.026**	**0.023 J**	**0.015 J**	**0.073**	**0.08**	**1.2**	--	0.01 U	0.01 U	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	0.0002	mg/L	--	**0.0042 J**	0.1 U	**0.002 J**	0.05 U	0.05 U	**2.6**	--	**0.0046 J**	**0.013**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.0001	mg/L	--	**0.00093 J**	0.1 U	0.05 U	0.05 U	0.05 U	**1.3**	--	**0.0017 J**	**0.01**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.0002	mg/L	--	**0.00049 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.43 J**	--	**0.00092 J**	**0.0066 J**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.0002	mg/L	--	**0.0005 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.49 J**	--	**0.00066 J**	**0.0035 J**	< 0.19 U	< 0.19 U	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	0.0002	mg/L	--	**0.001 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.57**	--	0.01 UJ	**0.003 J**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0002	mg/L	--	0.01 U	0.1 U	0.05 U	0.05 U	0.05 U	**0.57**	--	**0.00092 J**	**0.0054 J**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.0002	mg/L	--	**0.00095 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.97**	--	**0.0018 J**	**0.014**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.003	mg/L	--	0.01 U	0.1 U	0.05 U	0.05 U	0.05 U	**0.13 J**	--	0.01 UJ	0.01 U	< 0.19 U	< 0.19 U	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	0.001	mg/L	--	**0.0025 J**	**0.0048 J**	**0.0046 J**	**0.0057 J**	**0.0059 J**	**2**	--	**0.00078 J**	**0.0011 J**	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1	mg/L	--	**0.0013 J**	0.1 U	0.05 U	0.05 U	0.05 U	**3**	--	**0.0026 J**	**0.017**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1	mg/L	--	**0.016**	**0.013 J**	**0.014 J**	**0.02 J**	**0.019 J**	**3.9**	--	**0.0058 J**	**0.01**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	--	**0.0012 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.74**	--	0.01 UJ	**0.0034 J**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	0.02	mg/L	--	**3.1 D**	**12 D**	**9 D**	**7.4 D**	**9.3 D**	**100 D**	--	0.01 U	**0.0042 J**	< 0.19 U	0.026 J	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**0.56 J**	10 U
Phenanthrene	*	mg/L	--	**0.007 J**	**0.0099 J**	**0.013 J**	**0.014 J**	**0.015 J**	**10 D**	--	**0.016**	**0.064**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1	mg/L	--	**0.0012 J**	0.1 U	0.05 U	0.05 U	0.05 U	**2.7**	--	**0.0062 J**	**0.027**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																	
Aluminum (fume or dust)	*	mg/L	--	--	**0.041 B**	**0.12 BN**	**2.1**	**0.48**	--	--	**24**	**65**	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Antimony	0.01	mg/L	--	--	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	< 0.020 U	< 0.020 U	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0088 B**
Arsenic	0.05	mg/L	--	--	**0.0052 B**	0.01 U	**0.0077 B**	**0.0048 B**	--	--	0.01 U	**0.014**	< 0.020 U	< 0.010 U	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	--	--	**0.15**	**0.16**	**0.17**	**0.16**	--	--	**0.35**	**0.5**	**0.048**	**0.048**	**0.048**	**0.044**	**0.0461**	--	**0.0327**	**0.0451**	**0.0523**	0.2 U	**0.049**	**0.058**	**0.065**	**0.07**	**0.06**	**0.064**	**0.072**	**0.067**	**0.097**
Beryllium	0.004	mg/L	--	--	0.004 U	0.004 U	0.004 U	0.004 U	--	--	**0.00056 J**	**0.0021 B**	< 0.0040 U	< 0.0040 U	< 0.0040	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0019 B**
Cadmium	0.005	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	--	--	**0.001 J**	**0.0034 B**	< 0.0050 U	< 0.0050 U	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**32**	**54**	**61**	**63**	--	--	**140**	**130**	--	--	--	--	--	--	--	--	**21**	**24.4**	**29**	**29**	**36**	**30**	**29**	**33**	**33**	**29**
Chromium	0.1	mg/L	--	--	0.01 U	0.01 U	**0.0025 B**	0.01 U	--	--	**0.038**	**0.1**	**0.017**	0.0087 J	0.0066 J	< 0.0100	--	< 0.010	< 0.01	0.01 U	**0.0064**	0.01 U	**0.036**	**0.032**	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	0.01 U	0.01 U	**0.002 B**	**0.0023 B**	--	--	**0.006 J**	**0.017**	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0035 B**	**0.0033 B**	**0.0036 B**	**0.0033 B**	**0.0029 B**
Copper	1.3	mg/L	--	--	**0.0013 B**	**0.0017 B**	**0.0052 B**	**0.008 B**	--	--	**0.017 J**	**0.05**	< 0.020 U	< 0.020 U	< 0.020	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0027 B**	**0.0012 B**	**0.0018 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	**0.2**	**0.26**	**0.04**	**0.14**	**0.14**	**0.12**	**1.8**	**1.7**	**0.027**	--	< 0.010 U	< 0.010 U	0.0051 J	< 0.010	--	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	**11**	**9.6**	**15**	**15**	--	--	**39**	**66**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	--	--	0.005 U	0.005 U	**0.004 B**	**0.0028 B**	--	--	0.027 U	**0.061**	< 0.010 U	< 0.0050 U	< 0.0050	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	**0.0051**
Magnesium	*	mg/L	--	--	**28**	**19**	**24**	**22**	--	--	**31**	**34**	--	--	--	--	--	--	--	--	**14.1**	**15.9**	**18**	**18**	**17**	**17**	**17**	**20**	**20**	**19**
Manganese	*	mg/L	--	--	**1**	**3.1**	**3.6**	**4.1**	--	--	**0.88**	**1.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	--	--	0.0002 U	0.0002 U	0.00020 U	0.00020 U	--	--	0.0002 U	**0.00014 B**	< 0.00020 U	0.000083 J	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	**0.00022**	**0.0011**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	--	--	0.04 U	0.04 U	0.04 U	0.04 U	--	--	**0.02 J**	**0.053**	< 0.040 U	0.021 J	0.0043 J	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	**0.0093 B**
Potassium	*	mg/L	--	--	**7.2**	**9.3**	**8.7**	**7.9**	--	--	**18**	**20**	--	--	--	--	--	--	--	--	5 U	**4.85**	**7.4**	**9.7**	**8.8**	**10**	**10**	**11**	**10**	**9.9**
Selenium	0.05	mg/L	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	**0.0051 B**	< 0.020 U	< 0.010 U	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**11**	**10**	**12**	**11**	--	--	**31**	**26**	--	--	--	--	--	--	--	--	**57.8**	**63.1**	**68**	**64**	**59**	**56**	**57**	**62**	**60**	**55**
Thallium	0.002	mg/L	--	--	0.002 U	0.002 UN	0.002 U	0.002 UW	--	--	0.002 U	0.002 UW	< 0.0010 U	< 0.0010 U	< 0.0010	< 1.00	--	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UWN	0.002 UW	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	--	**0.047**	**0.12**	< 0.010 U	< 0.010 U	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	--	--	0.02 U	0.02 U	**0.0076 B**	0.02 U	--	--	**0.046**	**0.12**	< 0.020 U	< 0.020 U	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.014 B**	**0.0064 B**	**0.0066 B**	**0.0064 B**	**0.0086 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-23																
		Sample Date	7/22/2009	01/13/2009	07/15/2008	1/9/2008	7/11/2007	2/13/2007	7/12/2006	1/10/2006	7/21/2005	1/19/2005	7/14/2004	1/24/2004	7/20/2003	1/16/2003	7/17/2002	1/18/2002	7/10/2001
		Unit	Post-ISCO								Pre-ISCO								
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**21 J**	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**27**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**130**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.8**	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**66**	2.0 U	2.0 U
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.78 J**	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.63 J**	10 U	10 U
Acenaphthylene	10	µg/L	< 0.19	**0.021 J**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	**0.056 J**	**0.093 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.20	**0.026 J**	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.20	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.20	< 0.19	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.20	**0.037 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.20	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.20	**0.028 J**	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	**0.027 J**	**0.053 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.20	**0.024 J**	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.19	**16**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**5.9 J**	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.20	**0.032 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.060 B**	**0.038 B**	0.2 U	0.2 U
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	0.052	0.075	**0.044**	**0.0515**	**0.0280**	**0.0307**	**0.0312**	0.2 U	**0.0332**	**0.036**	**0.034**	**0.043**	0.01 U	**0.049**	**0.092**	**0.19**	**0.14**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	**0.00066 B**	0.004 U
Cadmium	0.005	mg/L	< 0.0050	**0.0038 J**	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**10.1**	**10.1**	**13**	**13**	**16**	**14**	**21**	**32**	**50**	**44**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0016 B**	0.01 U
Copper	1.3	mg/L	< 0.020	**0.0033 J**	< 0.020	< 0.0100	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0010 B**	**0.0022 B**	**0.0011 B**	**0.00094 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	**0.0033 J**	< 0.0050	< 0.0100	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	**9.43**	**9.04**	**12**	**12**	**14**	**12**	**20**	**29**	**47**	**42**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	**0.0083 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	5 U	1 U	1 U	1 U	1 U	**0.7**	**0.71 B**	**0.87 B**	**1.3 N**	**0.93 B**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**72.4**	**73.7**	**95**	**95**	**110**	**110**	**160**	**270**	**380**	**330**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.022	0.049	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	**0.0314**	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	**0.0087 B**	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-201	MW-202					MW-208		MW-209	MW-210
		Sample Date	7/9/2002	1/16/2003	7/12/2002	1/17/2002	7/11/2001	1/17/2001	7/11/2001	1/16/2001	4/3/2002	10/5/2006
		Unit	Pre-ISCO	Pre-ISCO					Pre-ISCO		Pre-ISCO	Post-ISCO
Volatile Organic Compounds												
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	**0.023 J**	0.025 U	0.025 U	0.025 UJ	--	50 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	**0.00025 J**	0.001 U	**0.0017**	**0.0012**	0.001 U	5 U
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	**0.00094 J**	0.001 U	**0.00046 J**	**0.00045 J**	--	5 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00035 J**	0.005 U	0.005 U	5 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00011 J**	0.001 U	0.001 U	5 U
Toluene	1	mg/L	0.001 U	0.001 U	**0.00051 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	5 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00032 J**	0.001 U	0.001 U	5 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	5 U
Semivolatile Organic Compounds												
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Acenaphthene	2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U
Dibenzofuran	0.001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Fluoranthene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Fluorene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Pyrene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Inorganic Compounds												
Aluminum (fume or dust)	*	mg/L	**0.042 J**	**0.050 B**	**0.037 B**	**0.12 B**	0.2 U	0.2 U	**0.17 B**	**19**	--	--
Antimony	0.01	mg/L	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	**0.005 B**	0.02 U	**0.013 J**	--	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.024**	**0.033**	--	0.05 U
Barium	2	mg/L	**0.084**	**0.064**	**0.11**	**0.13**	**0.13**	**0.12**	**0.21**	**0.3**	--	**0.0474**
Beryllium	0.004	mg/L	0.004 U	0.0040 U	0.004 U	**0.00077 B**	**0.00058 B**	**0.002 B**	0.004 U	0.0018 U	--	0.01 U
Cadmium	0.005	mg/L	0.0011 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0011 B**	0.005 U	--	0.005 U
Calcium metal	*	mg/L	**49**	**38**	**52**	**64**	**59**	**60**	**11**	**10**	--	--
Chromium	0.1	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 UN	0.01 U	0.01 UN	**0.025**	--	0.01 U
Cobalt	*	mg/L	**0.0099 J**	**0.0069 B**	**0.01**	**0.015**	**0.012**	**0.014**	**0.0014 B**	**0.0038 J**	--	--
Copper	1.3	mg/L	0.0016 U	0.020 U	**0.0012 B**	0.02 U	0.02 UN	0.02 U	**0.0021 BN**	**0.064**	--	0.01 U
Cyanide	0.2	mg/L	**0.12**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U
Iron	*	mg/L	**0.28**	**0.019 B**	**0.076**	**0.13**	0.05 U	**0.043 B**	**85**	**100**	--	--
Lead	0.015	mg/L	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	**0.0035 B**	**0.0041 B**	**0.099**	--	0.01 U
Magnesium	*	mg/L	**39**	**32**	**44**	**56**	**52**	**53**	**17**	**17**	--	--
Manganese	*	mg/L	**1.5**	**0.45**	**1.2**	**1.9 N**	**1.6 N**	**1.7**	**0.9 N**	**0.98**	--	--
Mercury	0.002	mg/L	0.0002 U	**0.000078 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	--	0.0002 U
Nickel	0.1	mg/L	**0.0049 J**	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0097 J**	--	0.02 U
Potassium	*	mg/L	**1.1**	**1.0**	**1.4**	**1.7 N**	**1.6**	**1.6**	**2.0**	**2.6**	--	--
Selenium	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.02 U
Sodium	*	mg/L	**100**	**100**	**18**	**150**	**170**	**120**	**44**	**44**	--	--
Thallium	0.002	mg/L	0.002 UJ	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U	0.002 U	0.002 U	--	0.001 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.0028 B**	**0.0033 B**	**0.003 B**	**0.0026 B**	0.01 U	0.01 U	**0.041**	--	0.01 U
Zinc	2	mg/L	**0.018 J**	0.020 U	**0.0086 B**	**0.017 B**	**0.017 B**	**0.0095 B**	**0.023**	**0.069**	--	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-212						MW-213	MW-301D	MW-301S									MW-308SAP
		Sample Date	7/22/2005	1/16/2003	7/12/2002	1/16/2002	7/13/2001	1/18/2001	4/4/2002	7/19/2003	1/20/2003	1/20/2003	7/17/2002	7/17/2002	4/4/2002	1/17/2002	1/17/2002	7/17/2001	1/17/2001	1/19/2001
		Unit	Pre-ISCO						Pre-ISCO	Pre-ISCO	Pre-ISCO									Pre-ISCO
Volatile Organic Compounds																				
Acetone	4	mg/L	0.025 U	**0.016 J**	0.025 U	0.025 U	0.025 U	0.025 U	--	0.63 U	**0.074 J**	**0.11 J**	0.12 U	0.12 U	--	**0.12 R**	**0.12 R**	0.12 U	0.12 U	5 U
Benzene	0.005	mg/L	0.001 U	**0.00014 J**	0.001 U	0.001 U	0.001 U	**0.00012 J**	0.001 U	--	**0.071**	**0.076**	**0.074**	**0.099**	**0.05**	**0.051**	**0.056**	**0.075**	**0.057**	**33**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.2 U
Dichloromethane	0.005	mg/L	0.005 U	**0.00033 J**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.13 U	**0.0021 J**	**0.0026 J**	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	1 U
Ethylbenzene	0.7	mg/L	0.001 U	**0.00011 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	**0.54**	**0.65**	**0.88**	**0.71 D**	**0.48**	**0.41**	**0.42**	**0.53**	**0.54**	**0.68**
Toluene	1	mg/L	0.001 U	**0.00041 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	**0.0049 J**	**0.0064**	**0.0068**	**0.0069**	**0.011**	**0.0041 J**	0.005 U	**0.014**	**0.015**	**14**
Trichloroethylene	0.005	mg/L	0.001 U	**0.00017 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0046 J**	0.005 U	0.005 U	0.2 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--	**0.15 B**	**0.2 B**	**0.27**	**0.31**	--	**0.14**	**0.15**	**0.28**	**0.3**	**4.6**
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.46 J M**	**0.32 D**	**0.32 D**	**0.47 D**	**0.49 D**	--	**0.44**	**0.5**	**0.38**	**0.81 D**	**0.69 D**
Acenaphthene	2	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.014**	**0.079**	**0.086**	**0.093**	**0.1**	**0.077**	**0.083 J**	**0.1**	**0.085**	**0.14**	**0.012**
Acenaphthylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00081 J**	**0.13**	**0.0035 J**	**0.0031 J**	**0.0047 J**	**0.0048 J**	0.01 U	**0.012 J**	**0.0097 J**	**0.0073 J**	**0.036**	**0.18**
Anthracene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0046 J**	**0.0055 J**	**0.0071 J**	**0.0074 J**	**0.0049 J**	**0.0064 J**	**0.0061 J**	**0.0036 J**	**0.0081 J**	**0.0038 J**
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	**0.0043 J**	**0.0048 J**	**0.0054 J**	**0.006 J**	--	**0.0054 J**	**0.0064 J**	**0.0045 J**	**0.0092 J**	**0.0072 J**
Fluoranthene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.002 J**	**0.0024 J**	**0.0026 J**	**0.0028 J**	**0.0014 J**	**0.004 J**	0.1 U	0.05 U	**0.0033 J**	**0.0017 J**
Fluorene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.024**	**0.025**	**0.028**	**0.033**	**0.036**	**0.02**	**0.028 J**	**0.028 J**	**0.025 J**	**0.041**	**0.031**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0059 J**	**7.3 J M**	**1.3 D**	**1.3 D**	**2 D**	**1.9 D**	**1.4 D**	**1.6**	**1.6 D**	**1.6 D**	**3.3 D**	**6.4 D**
Phenanthrene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0012 J**	**0.021**	**0.029**	**0.032**	**0.035**	**0.038**	**0.023**	**0.039 J**	**0.04 J**	**0.028 J**	**0.05**	**0.026**
Pyrene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0025 J**	**0.003 J**	**0.0027 J**	**0.0032 J**	**0.0022 J**	**0.007 J**	0.1 U	0.05 U	**0.0043 J**	**0.0018 J**
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	**1.99**	**0.046 B**	**0.031 B**	**0.096 B**	**0.063 B**	**0.046 B**	--	**0.5**	0.2 U	0.2 U	**0.045 B**	**0.043 B**	--	0.2 U	0.2 U	**0.047 BN**	**0.48**	**0.1 B**
Antimony	0.01	mg/L	0.006 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	**0.011 B**	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	**0.0079 B**	**0.0062 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0685**	**0.25**	**0.26**	**0.32**	**0.3**	**0.29**	--	**0.39**	**0.32**	**0.29**	**0.36**	**0.35**	--	**0.31**	**0.32**	**0.35**	**0.38**	**0.37**
Beryllium	0.004	mg/L	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.00077 U	0.00073 U	0.004 U	**0.0015 B**	0.004 U
Cadmium	0.005	mg/L	0.005 U	**0.0010 B**	**0.0012 B**	**0.00074 B**	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**40.2**	**12**	**12**	**16**	**14**	**14**	--	**37**	**78**	**75**	**74**	**73**	--	**87**	**85**	**84**	**95**	**22**
Chromium	0.1	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	**0.0046 B**	**0.0054 B**	**0.0072 B**	**0.0067 B**	**0.0064 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0028 B**
Copper	1.3	mg/L	0.02 U	**0.0018 B**	**0.0011 B**	**0.0041 B**	0.02 U	**0.002 B**	--	0.02 U	**0.0014 B**	**0.0013 B**	**0.0014 B**	**0.0014 B**	--	0.02 U	0.02 U	0.02 U	**0.0025 B**	**0.0016 B**
Cyanide	0.2	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.015 U	0.01 U	**0.0052 B**	0.01 U	0.01 U	--	**0.0062 B**	**0.0051 B**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**1.89**	**0.91**	**0.76**	**1.3**	**0.91**	**1.1**	--	**31**	**41**	**38**	**46**	**46**	--	**37**	**38**	**36**	**34**	**10 N**
Lead	0.015	mg/L	**0.0389**	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	--	**0.007**	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	**0.0027 B**	0.005 U
Magnesium	*	mg/L	**4.18**	**7.1**	**6.9**	**9**	**8.5**	**8.2**	--	**27**	**40**	**37**	**45**	**45**	--	**37**	**38 J**	**33**	**34**	**11**
Manganese	*	mg/L	**0.274**	**0.86**	**0.89**	**1.3**	**1.1**	**1.1**	--	**2.8**	**5**	**4.7**	**5.9**	**5.9**	--	4.4 U	**4.6 N**	**4.8**	**5.0**	**1.1**
Mercury	0.002	mg/L	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	--	0.0002 U	**0.00013 B**	**0.00012 B**	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**23.4**	**2.4**	**2.4**	**2.5**	**2.4**	**2.4**	--	**3.6**	**13**	**12**	**13**	**13**	--	14 U	**14 J**	**14**	**15**	**2.3**
Selenium	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**16.4**	**15**	**14**	**16**	**16**	**15**	--	**46**	**13**	**12**	**13**	**13**	--	**12**	**12**	**12**	**10**	**23**
Thallium	0.002	mg/L	0.001 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U	--	0.002 U	0.002 UWN	0.002 UWN	0.002 UWN	0.002 UWN	--	0.002 U	0.002 U	0.002 UN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0028 U	0.0032 U	0.01 U	**0.0027 B**	0.01 U
Zinc	2	mg/L	**0.0564**	**0.084**	**0.093**	**0.057**	0.02 U	**0.019 B**	--	**0.04**	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	**0.011 B**	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-405D								MW-407D											
			7/16/2004	1/24/2004	7/19/2003	1/17/2003	7/16/2002	1/16/2002	7/16/2001	1/23/2001	1/15/2006	7/20/2005	2/7/2005	7/13/2004	1/22/2004	7/20/2003	1/17/2003	7/16/2002	7/02 DUP	1/15/2002	7/17/2001	1/19/2001
			Pre-ISCO								Post-ISCO	Pre-ISCO										
Volatile Organic Compounds																						
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	**1.6**	**1.7**	1.0 U	**1.9**	**3.3**	1.0 U	**2.7**	**1.8**	**0.38 J**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	**0.25 J**	1.0 U	**0.2 J**	1.0 U	1.0 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.41 J**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**1.6 J**	**2.2**	2.0 U	**2.4**	**1.6 J**	**0.65 J**
Semivolatile Organic Compounds																						
2-Methylnaphthalene	*	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.44**	**0.51**	**0.92**	**5.4**	**4.4**	**11**	**0.39 J**	**1.8 J**	10 U	**4.2 J**	**1.1 J**	10 U
Acenaphthene	2	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	**2.2**	**3.5**	**12**	**15**	**18**	**8.9 J**	**13**	10 U	**8.5 J**	**2.7 J**	10 U
Acenaphthylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	**0.28**	**0.83**	**1.2**	10 U	**0.82 J**	**1.2 J**	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	0.02	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.21**	**0.66**	**0.23**	**17**	**16**	**47**	10 U	**0.95 J**	10 U	**11**	**4.8 J**	**1.2 J**
Phenanthrene	*	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	**0.8**	**0.73**	10 U	**0.5 J**	**0.65 J**	10 U	10 U	10 U	10 U
Pyrene	1	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																						
Aluminum (fume or dust)	*	mg/L	**11**	**0.33**	**7.6**	**4.5**	**1.9**	**2.1 N**	**1.2**	**1.1**	**3.46**	**1.25**	**3.9**	**1.5**	**0.32**	**0.7**	**0.21**	**0.51**	**1.3**	**0.63 N**	**0.37 N**	**0.29**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0034 B**	0.01 U	0.010 U	**0.0052 B**	**0.0053 B**
Barium	2	mg/L	**0.21**	**0.22**	**0.25**	**0.29**	**0.27**	**0.25**	**0.23**	**0.25**	**0.544**	**0.45**	**0.76**	**0.56**	**0.36**	**0.38**	**0.54**	**0.42**	**0.27**	**0.45**	**0.5**	**0.82**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	**0.0031 B**	0.005 U	0.0050 U	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0009 B**	0.005 U	0.005 U	0.0050 U	**0.00088 B**	**0.0032 B**
Calcium metal	*	mg/L	**16**	**21**	**21**	**22**	**20**	**21**	**19**	**16**	**48.6**	**45.1**	**58**	**45**	**35**	**36**	**51**	**38**	**20**	**42**	**53**	**82**
Chromium	0.1	mg/L	**0.011**	0.01 U	**0.01**	**0.0058 B**	**0.0021 B**	**0.0030 B**	0.01 U	0.01 U	**0.0053**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0017 B**
Cobalt	*	mg/L	**0.011**	**0.011**	**0.02**	**0.017**	**0.015**	**0.015**	**0.014**	**0.014**	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0047 B**	**0.0036 B**	**0.014**	**0.0030 B**	**0.0027 B**	**0.0047 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	**0.0074 B**	**0.0047 B**	**0.0010 B**	**0.0026 B**	**0.0023 B**	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0037 B**	**0.0022 B**	**0.0027 B**	**0.0018 B**	0.02 U	**0.0018 B**
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	**11**	**0.38**	**16**	**5.6**	**2.5**	**3.1 N**	**1.8**	**2.4**	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	0.005 U	0.005 U	**0.02**	**0.0031 B**	**0.0018 B**	**0.0017 B**	0.005 U	0.005 U	**0.0073**	0.005 U	**0.013**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U
Magnesium	*	mg/L	**15**	**19**	**19**	**20**	**17**	**18**	**16**	**13**	**43.3**	**35.8**	**37**	**23**	**17**	**18**	**25**	**19**	**17**	**21**	**28**	**43**
Manganese	*	mg/L	**0.53**	**0.77**	**0.79**	**0.95**	**0.9**	**1.1**	**1.0**	**1.0**	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	**0.01 B**	**0.008 B**	**0.0080 B**	**0.0065 B**	**0.0051 B**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0078 B**	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.3**	**2.7**	**3.4**	**3**	**3.2**	**3.4**	**3.6**	**5.3**	**21.7**	**17.7**	**20**	**6.8**	**5.1**	**7**	**8.1**	**6.8**	**3**	**7.0**	**13**	**17**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	**56**	**35**	**37**	**38**	**35**	**37**	**36**	**38**	**323**	**286**	**54**	**79**	**55**	**70**	**97**	**73**	**35**	**81**	**150**	**180**
Thallium	0.002	mg/L	0.002 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.0020 U	0.002 U	0.002 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UW	0.0020 U	0.002 UN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	**0.028**	0.01 U	**0.03**	**0.013**	**0.0057 B**	**0.0067 B**	**0.0038 B**	**0.0035 B**	**0.0082**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0037 B**	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.027**	**0.03**	**0.07**	**0.19**	**0.019 B**	**0.070**	**0.021**	**0.019 B**	**0.0216**	0.02 U	**0.044**	0.02 U	0.02 U	**0.03**	**0.033**	**0.0063 B**	**0.017 B**	**0.026**	0.02 U	**0.012 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-01D			TLC-01S		TLC-02S					
		Sample Date	1/18/2002	7/18/2001	1/23/2001	1/18/2002	1/23/2001	4/4/2002	3/8/2002	3/8/2002	1/18/2002	7/17/2001	1/23/2001
		Sample ID	TLC01D-011802	TLC01D-071801	TLC01D 012301	TLC01S-011802	TLC01S 012301	TLC02S-040402	TLC2S-030802	TLC2S-030802 SOLUBLE	TLC02S-011802	TLC02S-071701	TLC02S 012301
		Unit											
Volatile Organic Compounds													
Acetone	4	mg/L	0.5 U	**0.5 R**	0.25 U	**0.032**	**0.035**	--	**3.8**	--	5 U	0.62 U	2.5 U
Benzene	0.005	mg/L	**1.8**	**2**	**1.8**	**0.099**	**0.00036 JB**	**20**	**9.8**	--	**21**	**25 D**	**21**
Carbon Disulfide	4	mg/L	0.02 U	0.02 U	0.01 U	0.001 U	0.001 U	--	0.05 U	--	0.2 U	0.025 U	0.1 U
Dichloromethane	0.005	mg/L	0.1 U	0.1 U	0.05 U	0.005 U	0.005 U	1 U	0.25 U	--	1 U	0.12 U	0.5 U
Ethylbenzene	0.7	mg/L	**0.46**	**0.24**	**0.24**	**0.012**	**0.00033 J**	**1.4**	**0.52**	--	**0.86**	**1.4**	**1.2**
Toluene	1	mg/L	**0.26**	**0.21**	**0.46**	**0.016**	**0.0004 J**	0.2 U	0.05 U	--	0.2 U	**0.041**	0.1 U
Trichloroethylene	0.005	mg/L	0.02 U	0.02 U	0.01 U	0.001 U	0.001 U	0.2 U	0.05 U	--	0.2 U	**0.012 J**	0.1 U
Xylenes, total	2	mg/L	**0.39**	**0.24**	**0.25**	**0.012**	**0.00061 J**	--	**0.36**	--	**0.57**	**1.3**	**0.93**
Semivolatile Organic Compounds													
2-Methylnaphthalene	*	mg/L	**0.19 DJ**	**0.081**	**0.09**	--	**0.00041 J**	--	**1.5**	--	**0.77 DJ**	**0.94**	0.01 U
Acenaphthene	2	mg/L	**0.055**	**0.021 J**	**0.015**	--	**0.00081 J**	**0.17 J**	**0.22**	--	**0.069**	**0.092**	0.01 U
Acenaphthylene	0.0002	mg/L	**0.015**	**0.0098 J**	**0.028**	--	0.01 U	0.25 U	**0.014 J**	--	0.01 U	0.05 U	0.01 U
Anthracene	0.0002	mg/L	**0.0044 J**	**0.002 J**	**0.0019 J**	--	0.01 U	**0.018 J**	**0.076 J**	--	**0.0079 J**	**0.0078 J**	0.01 U
Benz(a)anthracene	0.0001	mg/L	**0.00051 J**	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.024 J**	--	**0.00062 J**	0.05 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.014 J**	--	0.01 U	0.05 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.011 J**	--	0.01 U	0.05 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.05 UJ	0.01 U	--	0.01 U	0.25 U	**0.01 J**	--	0.01 U	0.05 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.0086 J**	--	0.01 U	0.05 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.016 J**	--	0.01 U	0.05 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.05 UJ	0.01 U	--	0.01 U	0.25 U	0.1 U	--	0.01 U	0.05 U	0.01 U
Dibenzofuran	0.001	mg/L	**0.0056 J**	**0.0024 J**	**0.003 J**	--	0.01 U	--	**0.052 J**	--	**0.017**	**0.021 J**	0.01 U
Fluoranthene	1	mg/L	**0.0032 J**	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.055 J**	--	**0.0024 J**	**0.0023 J**	0.01 U
Fluorene	1	mg/L	**0.026**	**0.01 J**	**0.011**	--	0.01 U	**0.074 J**	**0.11**	--	**0.029**	**0.039 J**	0.01 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.05 UJ	0.01 U	--	0.01 U	0.25 U	**0.014 J**	--	0.01 U	0.05 U	0.01 U
Naphthalene	0.02	mg/L	**1.7 D**	**0.67**	**1.1 D**	--	**0.0056 J**	**11 D**	**13 D**	--	**9.5 D**	**12 D**	0.01 U
Phenanthrene	*	mg/L	**0.026**	**0.01 J**	**0.012**	--	0.01 U	**0.067 J**	**0.2**	--	**0.028**	**0.031 J**	0.01 U
Pyrene	1	mg/L	**0.0038 J**	0.05 U	**0.0019 J**	--	0.01 U	**0.014 J**	**0.045 J**	--	**0.0028 J**	0.05 U	0.01 U
Inorganic Compounds													
Aluminum (fume or dust)	*	mg/L	--	**1.1**	**2.5 N**	--	**1.1 N**	--	--	--	**0.039 B**	**0.06 BN**	**0.44 N**
Antimony	0.01	mg/L	--	0.02 U	0.02 U	--	0.02 U	--	--	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	--	0.01 U	**0.0033 B**	--	0.01 U	--	--	--	0.01 U	**0.0065 B**	**0.0035 B**
Barium	2	mg/L	--	**0.31**	**0.36**	--	**0.38**	--	--	--	**0.67**	**0.56**	**0.63**
Beryllium	0.004	mg/L	--	0.004 U	0.004 U	--	0.004 U	--	--	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	--	0.005 U	**0.0022 B**	--	**0.0015 B**	--	--	--	0.005 U	0.005 U	**0.00078 B**
Calcium metal	*	mg/L	--	**18**	**17**	--	**18**	--	--	--	**200**	**170**	**200**
Chromium	0.1	mg/L	--	**0.0023 J**	**0.0074 B**	--	**0.0021 B**	--	--	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	**0.004 J**	**0.0057 B**	--	**0.0078 B**	--	--	--	**0.0052 B**	**0.0042 B**	**0.0063 B**
Copper	1.3	mg/L	--	0.0012 U	**0.022**	--	**0.0060 B**	--	--	--	**0.002 B**	**0.0017 B**	**0.0038 B**
Cyanide	0.2	mg/L	--	**0.026**	**0.028**	--	**0.045**	--	**1.5**	**1.4**	**1.4**	**1.3**	**0.77**
Iron	*	mg/L	--	**55**	**71**	--	**49**	--	--	--	**20**	**20**	**23**
Lead	0.015	mg/L	--	0.005 U	**0.0024 B**	--	**0.0022 B**	--	--	--	0.005 U	0.005 U	**0.0025 B**
Magnesium	*	mg/L	--	**20**	**19**	--	**26**	--	--	--	**25**	**22**	**26**
Manganese	*	mg/L	--	**0.92**	**1.0**	--	**1.9**	--	--	--	**1.6**	**1.6**	**1.8**
Mercury	0.002	mg/L	--	0.0002 U	0.00020 U	--	0.00020 U	--	--	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	--	0.04 U	**0.019 B**	--	**0.013 B**	--	--	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	**3.5**	**2.8**	--	**3.5**	--	--	--	**10**	**9.7**	**9.4**
Selenium	0.05	mg/L	--	0.01 U	0.01 U	--	0.01 U	--	--	--	**0.0058 B**	0.01 U	0.01 U
Sodium	*	mg/L	--	**55**	**52**	--	**21**	--	--	--	**16**	**14**	**17**
Thallium	0.002	mg/L	--	0.002 U	0.002 U	--	0.002 UW	--	--	--	0.002 UW	0.002 UN	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	--	0.01 U	**0.0051 B**	--	0.01 U	--	--	--	**0.0031 B**	0.01 U	**0.0025 B**
Zinc	2	mg/L	--	**0.0086 J**	**0.015 B**	--	**0.0095 B**	--	--	--	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
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JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-03D				TLC-03S				
		Sample Date	1/21/2002	1/21/2002	7/13/2001	1/23/2001	3/8/2002	3/8/2002	1/21/2002	7/13/2001	1/23/2001
		Sample ID	TLC03D-012102	TLC03SDUP-012102	TLC03D-071301	TLC03D 012301	TLC03S-030802 SOLUBLE	TLC3S-030802	TLC03S-012102	TLC03S-071301	TLC03S-012301
		Unit									
Volatile Organic Compounds											
Acetone	4	mg/L	**0.021 J**	0.025 U	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	**0.0006 J**	**0.1**	0.001 U	0.001 U	--	**0.19 D**	**0.12**	0.001 U	**0.012**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	**0.0012 JB**
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	**0.00013 J**
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	--	0.002 U	0.002 U	0.002 U	0.002 U
Semivolatile Organic Compounds											
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthene	2	mg/L	0.01 U	**0.024**	0.01 U	0.01 U	--	**0.021**	**0.025**	**0.019**	**0.025**
Acenaphthylene	0.0002	mg/L	0.01 U	**0.001 J**	0.01 U	0.01 U	--	**0.00098 J**	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	**0.00074 J**	0.01 U	0.01 U	--	0.01 U	**0.00085 J**	0.01 U	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.00047 J**	**0.00041 J**	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.01 U	**0.00054 J**	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene	1	mg/L	0.01 U	**0.0022 J**	**0.00037 J**	0.01 U	--	**0.0021 J**	**0.0023 J**	**0.0013 J**	**0.0029 J**
Fluorene	1	mg/L	0.01 U	**0.011**	0.01 U	0.01 U	--	**0.006 J**	**0.012**	**0.0064 J**	**0.011**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Pyrene	1	mg/L	0.01 U	**0.002 J**	0.01 U	0.01 U	--	**0.0017 J**	**0.0021 J**	**0.0013 J**	**0.0025 J**
Inorganic Compounds											
Aluminum (fume or dust)	*	mg/L	0.031 U	0.2 U	**0.37**	**16 N**	--	--	0.2 U	**0.053 B**	**0.3**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.072**	**0.8**	**0.067**	**0.092**	--	--	**0.79**	**0.077**	**0.32**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**53**	**120**	**53**	**53**	--	--	**120**	**100**	**100**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	**0.016**	--	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	**0.0045 B**	**0.0019 B**	**0.0042 B**	**0.0071 B**	--	--	**0.0017 B**	**0.0017 B**	**0.002 B**
Copper	1.3	mg/L	0.0019 U	**0.0014 B**	0.02 U	**0.016 B**	--	--	**0.0016 B**	0.02 U	**0.00099 B**
Cyanide	0.2	mg/L	0.01 U	**0.37**	0.01 U	0.01 U	**0.55**	**0.63**	**0.31**	**0.11**	**0.064**
Iron	*	mg/L	**0.19**	**8.7**	**0.31**	**4.3**	--	--	**8.5**	**0.49**	**8.8**
Lead	0.015	mg/L	0.0024 U	**0.0024 B**	0.005 U	**0.0067**	--	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**33**	**20**	**32**	**32**	--	--	**20**	**18**	**17**
Manganese	*	mg/L	**0.68**	**0.26**	**0.71**	**0.75**	--	--	**0.25**	**0.12**	**0.31**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.00020 U	--	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	**0.0087 B**	--	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**19**	**5.3**	**19**	**19**	--	--	**5.2**	**3.1**	**4.1**
Selenium	0.05	mg/L	0.01 U	**0.005 B**	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**80**	**13**	**80**	**81**	--	--	**13**	**15**	**12**
Thallium	0.002	mg/L	0.002 UJ	0.002 U	0.002 UW	0.002 U	--	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	**0.016**	--	--	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.012 B**	**0.0072 B**	0.02 U	**0.017 B**	--	--	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-04D							TLC-04S						
		Sample Date	7/18/2003	1/15/2003	7/15/2002	1/15/2002	7/12/2001	1/22/2001	1/22/2001	1/20/2004	7/18/2003	1/15/2003	7/15/2002	1/15/2002	7/12/2001	1/22/2001
		Sample ID	TLC-4D-Q3-03	TLC04D-011503	TLC04D-071502	TLC4D-011502	TLC04D-071201	010104D 012201	TLC04D 012201	TLC-4S-Q1-04	TLC-4S-Q3-03	TLC04S-011503	TLC04S-071502	TLC4S-011502	TLC04S-07120	TLC04S 012201
		Unit														
Volatile Organic Compounds																
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.25 U	0.025 U	0.12 U	0.5 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.12 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	**0.0022 J**	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U
Carbon Disulfide	4	mg/L	**0.004**	0.001 UJ	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.005 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 UJ	**0.00043 J**	0.005 U	0.05 U	0.005 U	0.025 U	0.1 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.025 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	**0.00019 J**	0.001 U	0.001 U	0.005 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	**0.00055 J**	0.001 U	0.001 U	0.005 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.02 U	0.002 U	0.01 U	0.04 U	0.002 U	0.002 U	**0.00036 J**	0.002 U	0.002 U	0.01 U
Semivolatile Organic Compounds																
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthene	2	mg/L	0.01 U	**0.00039 J**	**0.00043 J**	0.01 U	**0.00046 J**	0.01 U	**0.00055 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0015 J**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	**0.00067 J**	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00029**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluorene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00079 J**
Pyrene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Inorganic Compounds																
Aluminum (fume or dust)	*	mg/L	**2.6**	**2.7**	**2.9**	**0.059 BN**	**0.13 B**	**0.91**	**0.53**	0.2 U	**0.8**	**0.91**	**4.5**	**0.30 N**	**0.87**	**6.0**
Antimony	0.01	mg/L	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.14**	**0.15**	**0.13**	**0.13**	**0.14**	**0.14**	**0.14**	**0.19**	**0.17**	**0.16**	**0.18**	**0.18**	**0.17**	**0.19**
Beryllium	0.004	mg/L	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**41**	**44**	**43**	**43**	**45**	**42**	**40**	**50**	**43**	**38**	**37**	**38**	**39**	**37**
Chromium	0.1	mg/L	0.01 U	0.0033 U	**0.0028 B**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0043 B**	0.010 U	0.01 U	**0.0060 B**
Cobalt	*	mg/L	0.01 U	**0.0016 B**	**0.0015 B**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0027 B**	**0.002 B**	0.010 U	0.01 U	**0.0022 B**
Copper	1.3	mg/L	0.02 U	0.0017 U	**0.002 B**	0.020 U	0.02 U	**0.0016 B**	**0.0033 B**	0.02 U	0.02 U	0.0014 U	**0.0024 B**	0.020 U	0.02 U	**0.0026 B**
Cyanide	0.2	mg/L	0.015 U	0.010 UJ	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	**3.1**	**3.6**	**2.5 N**	**2.1 N**	**3.3**	**4.2 N**	**3.9 N**	**0.48**	**1**	**0.79**	**2.8 N**	**0.70 N**	**0.53**	**3.9 N**
Lead	0.015	mg/L	0.005 U	0.0018 U	**0.002 B**	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.002 B**	0.0050 U	0.005 U	**0.0017 B**
Magnesium	*	mg/L	**26**	**25**	**24**	**25**	**26**	**24**	**23**	**26**	**25**	**20**	**19**	**20**	**21**	**20**
Manganese	*	mg/L	**1.4**	**1.4**	**1.3**	**1.4**	**1.4**	**1.3**	**1.3**	**1.6**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**
Mercury	0.002	mg/L	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	**9.5**	**10**	**10**	**11**	**11**	**10**	**10**	**11**	**9.6**	**9.6**	**9.9**	**9.8**	**10**	**9.9**
Selenium	0.05	mg/L	**0.02**	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	0.010 U	**0.0044 B**	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	**80**	**86**	**80**	**83**	**83**	**81**	**78**	**87**	**79**	**76**	**77**	**78**	**78**	**77**
Thallium	0.002	mg/L	0.002 U	0.0020 UJ	0.002 UWN	0.0020 U	0.002 UW	0.002 U	0.002 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.0020 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.0028 B**	**0.0026 B**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	**0.0090 B**	**0.019**	**0.0064 B**	**0.0088 B**	**0.019**
Zinc	2	mg/L	**0.03**	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.0078 B**	**0.0069 B**	0.020 U	0.02 U	**0.0093 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-05D							TLC-05S							
		Sample Date	1/20/2004	7/18/2003	1/15/2003	7/15/2002	1/15/2002	7/11/2001	1/19/2001	1/20/2004	7/18/2003	1/15/2003	7/15/2002	7/15/2002	1/15/2002	7/11/2001	1/19/2001
		Sample ID	TLC-5D-Q1-04	TLC-5D-Q3-03	TLC05D-011503	TLC05D-071502	TLC05D-011502	TLC05D-071101	TLC05D-011901	TLC-5S-Q1-04	TLC-5S-Q3-03	TLC05S-011503	TLC05S-071502 DUP	TLC05S-071502	TLC05S-011502	TLC05S-071101	TLC05S011901
		Unit															
Volatile Organic Compounds																	
Acetone	4	mg/L	0.12 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.05 U	0.25 U	0.025 U	0.025 U	**0.091**	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0003 J**	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon Disulfide	4	mg/L	0.005 U	0.001 U	0.001 UJ	**0.00039 J**	0.001 U	0.001 U	0.002 U	0.01 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.025 U	0.005 U	0.005 UJ	**0.00074 J**	0.005 U	0.005 U	0.01 U	0.05 U	0.005 U	0.005 UJ	**0.00048 J**	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.005 U	0.001 U	0.001 U	**0.00036 J**	0.001 U	0.001 U	0.002 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	1	mg/L	0.005 U	0.001 U	0.001 U	**0.00067 J**	0.001 U	0.001 U	0.002 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.005 U	**0.004**	**0.0036**	**0.0044**	**0.0031**	**0.0028**	**0.0033**	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.01 U	0.002 U	0.002 U	**0.00072 J**	0.002 U	**0.00046 J**	0.004 U	0.02 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Semivolatile Organic Compounds																	
2-Methylnaphthalene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthene	2	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00028 J**	0.01 U
Acenaphthylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene	1	mg/L	**0.00035**	0.01 U	**0.00036 J**	0.01 U	0.01 U	0.01 U	**0.00058 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluorene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Pyrene	1	mg/L	**0.00047**	0.01 U	**0.00072 J**	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Inorganic Compounds																	
Aluminum (fume or dust)	*	mg/L	**0.29**	**10**	**0.93**	**0.99**	**37**	**5.5**	**4.0**	0.2 U	0.2 U	**0.13 B**	**0.049 B**	**0.052 B**	**0.096 BN**	0.2 U	**0.17 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.16**	**0.19**	**0.16**	**0.17**	**0.29**	**0.19**	**0.13**	**0.077**	**0.08**	**0.068**	**0.073**	**0.073**	**0.071**	**0.068**	**0.068**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.0040 U	0.004 U	**0.0018 B**	**0.00079 B**	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**31**	**27**	**29**	**28**	**27**	**25**	**27**	**40**	**41**	**36**	**38**	**38**	**36**	**37**	**36**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.0019 U	0.01 U	**0.052**	**0.0074 BN**	**0.0057 B**	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 UN	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	**0.0054 B**	**0.0065 B**	**0.014**	**0.0067 B**	**0.0043 B**	0.01 U	0.01 U	**0.0034 B**	**0.0033 B**	**0.0034 B**	**0.0029 B**	**0.0028 B**	**0.0025 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.0011 U	**0.00097 B**	**0.015 B**	**0.0023 BN**	**0.0033 B**	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.020 U	**0.005 BN**	**0.0012 B**
Cyanide	0.2	mg/L	0.01 U	0.015 U	0.010 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	**3.4**	**12**	**5.6**	**4.5 N**	**20**	**8.6**	**4.7 N**	**0.076**	**0.19**	**0.30**	**0.19 N**	**0.18 N**	**0.10 N**	**0.79**	**0.76 N**
Lead	0.015	mg/L	0.005 U	**0.02**	0.0023 U	0.005 U	**0.027**	**0.0069**	**0.0091**	0.005 U	0.005 U	0.0024 U	0.005 U	0.005 U	0.0050 U	**0.0018 B**	0.005 U
Magnesium	*	mg/L	**17**	**15**	**16**	**15**	**16**	**14**	**15**	**23**	**27**	**21**	**23**	**23**	**22**	**20**	**20**
Manganese	*	mg/L	**1.4**	**1.3**	**1.3**	**1.4**	**1.5**	**1.3 N**	**1.4**	**2**	**2.1**	**1.7**	**1.9**	**1.9**	**1.8**	**1.8 N**	**1.9**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 UJ	**0.000080 B**	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.040 U	0.04 U	**0.027 B**	**0.0058 B**	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	**6.8**	**5.8**	**6.1**	**6.3**	**6.6**	**5.9**	**6.4**	**7.2**	**6.9**	**6.3**	**6.9**	**6.9**	**6.5**	**6.4**	**6.2**
Selenium	0.05	mg/L	0.01 U	0.01 UJ	0.010 U	**0.0076 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	**79**	**69**	**75**	**76**	**72**	**70**	**74**	**77**	**78**	**70**	**77**	**77**	**75**	**66**	**71**
Thallium	0.002	mg/L	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.002 U	0.002 U	0.002 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.002 UWN	0.0020 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.02**	0.010 U	0.01 U	**0.055**	**0.0081 B**	**0.0044 B**	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	**0.04**	0.020 U	0.02 U	**0.052**	**0.011 B**	**0.0098 B**	0.02 U	**0.18**	0.020 U	0.02 U	0.02 U	0.020 U	**0.0063 B**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-07D					TLC-07S						
		Sample Date	1/21/2003	7/16/2002	1/17/2002	7/12/2001	1/24/2001	1/21/2004	7/19/2003	1/21/2003	7/16/2002	1/16/2002	7/11/2001	1/24/2001
		Sample ID	TLC07D-012103	TLC07D-071602	TLC07D-011702	TLC07D-071201	TLC07D 012401	TLC-7S-Q1-04	TLC-7S-Q3-03	TLC07S-012103	TLC07S-071602	TLC07S-011602	TLC07S-071101	TLC07S 012401
		Unit												
Volatile Organic Compounds														
Acetone	4	mg/L	**0.038**	0.025 U	**0.018 J**	**0.062**	**0.048**	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	**0.00014 J**	0.001 U	0.001 U	**0.00023 J**	**0.00058 J**	0.001 U	0.001 U	**0.00014 J**	0.001 U	0.001 U	**0.00024 J**	**0.00072 J**
Carbon Disulfide	4	mg/L	**0.00037 J**	**0.00098 J**	0.001 U	**0.00036 J**	0.001 U	0.001 U	0.001 U	0.001 U	**0.0037**	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	**0.0003 J**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	**0.00011 J**	0.001 U	0.001 U	0.001 U	**0.00056 J**	0.001 U	0.001 U	**0.00021 J**	**0.00029 J**	0.001 U	0.001 U	**0.00016 J**
Toluene	1	mg/L	**0.00078 J**	0.001 U	**0.00037 J**	**0.00091 J**	**0.00075 J**	0.001 U	0.001 U	**0.00032 J**	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	**0.001 J**	**0.00066 J**	0.002 U	0.002 U	**0.00083 J**	0.002 U	0.002 U	**0.00061 J**	**0.0012 J**
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00087 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0042 J**
Acenaphthene	2	mg/L	**0.0016 J**	**0.00093 J**	--	**0.0014 J**	**0.0033 J**	**0.0078**	**0.026**	**0.011**	**0.0042 J**	**0.0055 J**	**0.018**	**0.03**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00064 J**	**0.0002**	0.01 U	0.01 U	0.01 U	0.01 U	**0.0022 J**	**0.0035 J**
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00045 J**	**0.00022**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00061 J**	0.0002 U	0.01 U	**0.00088 J**	0.01 U	**0.00044 J**	**0.0039 J**	**0.0071 J**
Fluoranthene	1	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0011 J**	**0.0029**	0.01 U	**0.0023 J**	**0.0016 J**	**0.0016 J**	**0.0031 J**	**0.004 J**
Fluorene	1	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0014 J**	**0.0025**	0.01 U	**0.0042 J**	**0.0017 J**	**0.0015 J**	**0.0064 J**	**0.013**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0011 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0058 J**
Phenanthrene	*	mg/L	0.01 U	**0.00043 J**	--	0.01 U	**0.0018 J**	0.0002 U	0.01 U	**0.00045 J**	0.01 U	**0.00041 J**	**0.011**	**0.016**
Pyrene	1	mg/L	0.01 U	0.01 U	--	**0.00055 J**	**0.0015 J**	**0.0026**	0.01 U	**0.0021 J**	**0.0014 J**	**0.0014 J**	**0.0026 J**	**0.0035 J**
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	**0.67**	--	--	**0.67**	--	0.2 U	**0.3**	**0.1 B**	**0.56**	0.036 U	**0.21**	**0.16 B**
Antimony	0.01	mg/L	0.02 U	--	--	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	--	--	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.37**	--	--	**0.37**	--	**0.38**	**0.43**	**0.39**	**0.34**	**0.35**	**0.4**	**0.4**
Beryllium	0.004	mg/L	0.004 U	--	--	0.004 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**21**	--	--	**21**	--	**84**	**83**	**86**	**75**	**77**	**84**	**90**
Chromium	0.1	mg/L	0.01 U	--	--	**0.0022 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	**0.0042 B**	--	--	**0.006 B**	--	0.01 U	0.01 U	**0.0045 B**	**0.0088 B**	**0.0089 B**	**0.0047 B**	**0.0053 B**
Copper	1.3	mg/L	**0.0045 B**	--	--	**0.0053 B**	--	0.02 U	0.02 U	**0.0024 B**	**0.00099 B**	0.02 U	0.02 UN	0.02 U
Cyanide	0.2	mg/L	--	--	--	0.01 U	--	**0.012**	**0.05**	**0.012**	0.01 U	**0.027**	0.01 U	**0.017**
Iron	*	mg/L	**13**	--	--	**17**	--	**39**	**25**	**31**	**34**	**33**	**33**	**29**
Lead	0.015	mg/L	0.005 U	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**13**	--	--	**13**	--	**67**	**68**	**67**	**63**	**64**	**66**	**67**
Manganese	*	mg/L	**1.7**	--	--	**1.5**	--	**3.4**	**2.1**	**2.8**	**3.9**	**4**	**2.6 N**	**2.4**
Mercury	0.002	mg/L	**0.000092 B**	--	--	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	--	--	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.4**	--	--	**2.7**	--	**4**	**6.4**	**5.6**	**3.9**	**3.5**	**5.9**	**6.5**
Selenium	0.05	mg/L	0.01 U	--	--	0.01 U	--	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**28**	--	--	**26**	--	**53**	**46**	**53**	**51**	**51**	**54**	**51**
Thallium	0.002	mg/L	0.002 UW	--	--	0.002 UW	--	0.001 U	0.002 U	0.002 UW	0.002 UW	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	--	--	**0.003 B**	--	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.028**	--	--	0.02 U	--	0.02 U	**0.03**	**0.022**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
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B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-08D					TLC-08S					
		Sample Date	1/22/2003	7/16/2002	1/16/2002	7/13/2001	1/19/2001	1/18/2001	1/17/2002	7/16/2002	1/21/2004	7/19/2003	1/21/2003
		Sample ID	TLC08D-012203	TLC08D-071602	TLC08D-011602	TLC08D-071301	TLC08D 011901	TLC08S 011801	TLC08S-011702	TLC08S-071602	TLC-8S-Q1-04	TLC-8S-Q3-03	TLC08S-012103
		Unit											
Volatile Organic Compounds													
Acetone	4	mg/L	0.025 U	0.025 U	**0.024 J**	0.025 U	0.025 U	0.025 U	0.025 U	**0.036**	1.2 U	0.63 U	0.05 U
Benzene	0.005	mg/L	**0.00064 J**	**0.00074 J**	**0.004**	**0.0015**	**0.0025**	**0.18**	**0.11**	**0.07**	**0.19**	**0.18**	**0.24**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	**0.00046 J**	**0.00059 J**	0.001 U	0.001 U	0.001 U	0.05 U	0.025 U	0.002 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00034 J**	0.25 U	0.13 U	0.01 U
Ethylbenzene	0.7	mg/L	**0.0002 J**	**0.00048 J**	**0.0039**	**0.004**	**0.0064**	**0.16**	**0.15**	**0.054**	**0.16**	**0.15**	**0.24**
Toluene	1	mg/L	0.001 U	**0.00073 J**	**0.0003 J**	**0.00069 J**	**0.00036 J**	**0.0035**	**0.0029**	**0.0014**	0.05 U	0.025 U	**0.0044**
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.05 U	0.025 U	0.002 U
Xylenes, total	2	mg/L	**0.001 J**	**0.0014 J**	**0.0033**	**0.0042**	**0.0055**	**0.079**	**0.073**	**0.023**	0.5 U	0.05 U	**0.092**
Semivolatile Organic Compounds													
2-Methylnaphthalene	*	mg/L	**0.0078 J**	**0.036**	--	0.01 U	0.01 U	**0.62**	**0.45 J**	**0.37 D**	**0.34**	**0.53 J M**	**0.44**
Acenaphthene	2	mg/L	**0.019**	**0.031**	--	**0.0087 J**	**0.0027 J**	**0.36**	**0.31 J**	**0.27 D**	**0.22**	**0.37**	**0.25**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0034 J**	**0.0035 J**	0.5 U	0.01 U	0.0002 U	0.01 U	0.05 U
Anthracene	0.0002	mg/L	**0.0015 J**	**0.0034 J**	--	**0.0022 J**	0.01 U	**0.02 J**	0.5 U	**0.016**	**0.022**	**0.025**	**0.016 J**
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0083 J**	0.5 U	**0.0016 J**	**0.0047**	0.01 U	**0.0042 J**
Benzo(a)pyrene	0.0002	mg/L	0.01 U	**0.00044 J**	--	0.01 U	0.01 U	**0.0071 J**	0.5 U	**0.0012 J**	**0.0018**	0.01 U	0.05 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0062 J**	0.5 U	0.01 U	0.0002 U	0.01 U	0.05 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	**0.0012 J**	--	0.01 U	0.01 U	**0.0075 J**	0.5 U	0.01 U	**0.0011**	0.01 U	0.05 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0063 J**	0.5 U	**0.001 J**	**0.0033**	0.01 U	0.05 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0093 J**	0.5 U	**0.0016 J**	**0.0036**	0.01 U	**0.004 J**
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	**0.00092 J**	--	0.01 U	0.01 U	**0.005 J**	0.5 U	0.01 U	0.0002 U	0.01 U	0.05 U
Dibenzofuran	0.001	mg/L	**0.0012 J**	**0.0023 J**	--	0.01 U	0.01 U	**0.021 J**	**0.016 J**	**0.013**	**0.02**	**0.022**	**0.014 J**
Fluoranthene	1	mg/L	**0.001 J**	**0.0016 J**	--	**0.0014 J**	0.01 U	**0.012 J**	0.5 U	**0.0074 J**	**0.016**	**0.018**	**0.012 J**
Fluorene	1	mg/L	**0.0058 J**	**0.011**	--	**0.0062 J**	0.01 U	**0.11**	**0.066 J**	**0.064**	**0.067**	**0.1**	**0.072**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	**0.00094 J**	--	0.01 U	0.01 U	**0.0046 J**	0.5 U	0.01 U	**0.00099**	0.01 U	0.05 U
Naphthalene	0.02	mg/L	**0.0031 J**	**0.019**	--	0.01 U	0.01 U	**3.8 D**	**4.1**	**2.6 D**	**6.7**	**8.9 J M**	**3.7 D**
Phenanthrene	*	mg/L	**0.0046 J**	**0.016**	--	**0.0078 J**	0.01 U	**0.11**	**0.083 J**	**0.078**	**0.091**	**0.12**	**0.085**
Pyrene	1	mg/L	**0.0012 J**	**0.0017 J**	--	**0.0016 J**	0.01 U	**0.015 J**	0.5 U	**0.011**	**0.02**	**0.023**	**0.016 J**
Inorganic Compounds													
Aluminum (fume or dust)	*	mg/L	**0.055 B**	**0.63**	--	**0.06 B**	**1.3**	**0.18 B**	**1.8**	--	**0.77**	**1.9**	**10**
Antimony	0.01	mg/L	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	**0.004 B**	0.01 U	--	0.01 U	**0.0037 B**	0.01 U	**0.0034 B**	--	0.01 U	0.01 U	**0.0088 B**
Barium	2	mg/L	**0.26**	**0.26**	--	**0.19**	**0.17**	**0.49**	**0.51**	--	**0.48**	**0.53**	**0.6**
Beryllium	0.004	mg/L	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	--	0.005 U	**0.0035 B**	**0.0011 B**	0.005 U	--	0.005 U	**0.006**	**0.0013 B**
Calcium metal	*	mg/L	**15**	**14**	--	**13**	**14**	**130**	**140**	--	**120**	**120**	**130**
Chromium	0.1	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0025 B**	0.01 U	**0.0022 B**	--	0.01 U	0.01 U	**0.012**
Cobalt	*	mg/L	**0.0021 B**	**0.0022 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0043 B**
Copper	1.3	mg/L	**0.0031 B**	**0.0067 B**	--	0.02 U	**0.015 B**	**0.0010 B**	**0.0041 B**	--	0.02 U	0.02 U	**0.022**
Cyanide	0.2	mg/L	0.01 U	--	--	0.01 U	0.01 U	**0.011**	**0.01 B**	--	**0.012**	0.015 U	**0.015**
Iron	*	mg/L	**8.7**	**10**	--	**10**	**10 N**	**37**	**40**	--	**36**	**30**	**48**
Lead	0.015	mg/L	0.005 U	0.005 U	--	0.005 U	0.005 U	**0.0017 B**	**0.03**	--	**0.005**	**0.03**	**0.086**
Magnesium	*	mg/L	**11**	**10**	--	**9.3**	**9.8**	**36**	**39**	--	**41**	**44**	**43**
Manganese	*	mg/L	**0.45**	**0.43**	--	**0.41**	**0.43**	**2.1**	**2.6 N**	--	**2.8**	**2.6**	**2.9**
Mercury	0.002	mg/L	**0.000087 B**	0.0002 U	--	0.0002 U	0.00020 U	0.00020 U	0.0002 U	--	0.0002 U	0.0002 U	**0.00028**
Nickel	0.1	mg/L	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	**0.0071 B**
Potassium	*	mg/L	**2.1**	**2.1**	--	**2.0**	**2.3**	**18**	**16 N**	--	**18**	**17**	**20**
Selenium	0.05	mg/L	0.01 U	**0.0047 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	**0.02**	0.01 U
Sodium	*	mg/L	**21**	**20**	--	**19**	**20**	**33**	**32**	--	**31**	**33**	**39**
Thallium	0.002	mg/L	0.002 U	0.002 UW	--	0.002 U	0.002 U	0.002 U	0.002 U	--	0.001 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.0022 B**	--	0.01 U	**0.0027 B**	0.01 U	**0.0048 B**	--	0.01 U	**0.02**	**0.024**
Zinc	2	mg/L	**0.056**	0.02 U	--	0.02 U	**0.011 B**	**0.0076 B**	**0.035**	--	0.02 U	**0.09**	**0.19**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-09D											
		Sample Date	7/16/2004	7/16/2004	1/21/2004	1/21/2004	7/19/2003	7/19/2003	1/21/2003	1/21/2003	7/16/2002	1/16/2002	1/18/2001	7/11/2001
		Sample ID	TLC-9D-Q3-04	TLC-9D-Q3-04 DUP	TLC-9D-Q1-04	TLC-9D-Q1-04 DUP	TLC-9D-Q3-03	TLC-9D-Q3-03 DUP	TLC09D-012103	TLC09D-012103 DUP	TLC09D-071602	TLC09D-011602	TLC09D 011801	TLC09D-071101
		Unit												
Volatile Organic Compounds														
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00012 J**	**0.00026 J**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00017 J**	0.001 U	0.001 U	**0.00042 J**	0.001 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0003 J**	**0.00035 J**	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	**0.0006 J**	**0.00052 J**	**0.00039 J**	**0.0007 J**	**0.00078 J**	0.002 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	mg/L	**0.0013**	**0.0014**	**0.0024**	**0.003**	0.01 U	0.01 U	**0.006 J**	**0.0049 J**	**0.0037 J**	**0.0097 J**	**0.025**	**0.0063 J**
Acenaphthene	2	mg/L	**0.0072**	**0.0081**	**0.0095**	**0.012**	**0.012**	**0.013**	**0.018**	**0.017**	**0.011**	**0.026**	**0.045**	**0.02**
Acenaphthylene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	**0.0016**	**0.0019**	**0.0019**	**0.0024**	0.01 U	0.01 U	**0.0036 J**	**0.0031 J**	**0.0029 J**	**0.0048 J**	**0.0065 J**	**0.0044 J**
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.0002 U	**0.0018**	**0.0021**	0.01 U	0.01 U	**0.0052 J**	**0.0046 J**	**0.0032 J**	**0.0072 J**	**0.014**	**0.0062 J**
Fluoranthene	1	mg/L	**0.0018**	**0.002**	**0.0018**	**0.0019**	0.01 U	0.01 U	**0.0035 J**	**0.0031 J**	**0.0025 J**	**0.0047 J**	**0.005 J**	**0.004 J**
Fluorene	1	mg/L	**0.0032**	**0.0036**	**0.0038**	**0.0046**	0.01 U	0.01 U	**0.009 J**	**0.0077 J**	**0.0056 J**	**0.011**	**0.021**	**0.01**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.0002 U	0.0002 U	**0.00039**	**0.00054**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0011 J**	**0.018**	**0.0031 J**
Phenanthrene	*	mg/L	**0.0066**	**0.0074**	**0.0075**	**0.0087**	0.01 U	0.01 U	**0.016**	**0.014**	**0.011**	**0.022**	**0.029**	**0.02**
Pyrene	1	mg/L	**0.0013**	**0.0016**	**0.0014**	**0.0015**	0.01 U	0.01 U	**0.0025 J**	**0.0024 J**	**0.0019 J**	**0.0033 J**	**0.0034 J**	**0.0032 J**
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.1 B**	**1.2**	**0.051 B**	**0.089 B**	**0.72**
Antimony	0.01	mg/L	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.33**	**0.31**	**0.32**	**0.32**	**0.31**	**0.31**	**0.33**	**0.31**	**0.32**	**0.33**	**0.31**	**0.3**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0006 B**
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0008 B**	0.005 U	0.005 U	**0.00094 B**	0.005 U
Calcium metal	*	mg/L	**18**	**17**	**20**	**20**	**18**	**19**	**19**	**19**	**18**	**20**	**22**	**19**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0024 B**	0.01 U	0.01 U	0.01 UN
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0024 B**	**0.0021 B**	**0.0025 B**	**0.0022 B**	0.01 U	**0.003 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0015 B**	**0.0022 B**	**0.0017 B**	0.02 U	0.02 U	0.02 UN
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**37**	**35**	**32**	**32**	**29**	**29**	**40**	**39**	**39**	**41**	**34**	**40**
Lead	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0028 B**
Magnesium	*	mg/L	**15**	**14**	**13**	**13**	**14**	**15**	**17**	**16**	**16**	**18**	**13**	**15**
Manganese	*	mg/L	**2.1**	**1.9**	**1.7**	**1.7**	**1.6**	**1.7**	**2.1**	**2**	**2**	**2.1**	**1.8**	**2.1 N**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000089 B**	**0.00012 B**	0.0002 U	0.0002 U	0.00020 U	0.0002 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.2**	**2**	**2.9**	**3**	**2.5**	**2.5**	**2**	**1.9**	**1.9**	**1.9**	**2.7**	**1.8**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.01**	0.01 U	0.01 U	**0.0065 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**34**	**32**	**30**	**30**	**29**	**29**	**39**	**38**	**35**	**39**	**31**	**36**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UW	0.002 UW	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0029 B**	0.01 U	0.01 U	**0.0023 B**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.02**	**0.019 B**	**0.022**	**0.0069 B**	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
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Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-09S										
		Sample Date	7/16/2004	1/21/2004	7/19/2003	1/21/2003	7/16/2002	1/16/2002	1/16/2002	7/10/2001	7/10/2001	1/18/2001
		Sample ID	TLC-9S-Q3-04	TLC-9S-Q1-04	TLC-9S-Q3-03	TLC09S-012103	TLC09S-071602	TLC09S-011602	TLC09SDUP-011602	TLC09S-071001	TLC09SDUP-071001	TLC09S 011801
		Unit										
Volatile Organic Compounds												
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	**0.00015 J**	**0.0028**	**0.0012**	**0.0015**	**0.0001 J**	**0.00013 J**	**0.00038 J**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0007 J**	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	**0.00041 J**	0.001 U	0.001 U	0.001 U	0.001 U	**0.00036 J**	0.001 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	**0.00033 J**	0.001 U	0.001 U	**0.00031 J**	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	**0.00062 J**	0.002 U	**0.00069 J**	**0.00051 J**	0.002 U	**0.00052 J**	**0.00078 J**
Semivolatile Organic Compounds												
2-Methylnaphthalene	*	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	**0.0019 J**	**0.0024 J**	**0.0028 J**	**0.00093 J**	**0.00087 J**	**0.0099 J**
Acenaphthene	2	mg/L	**0.012**	**0.036**	**0.016**	**0.034**	**0.05**	**0.046**	**0.054**	**0.023**	**0.025**	**0.065**
Acenaphthylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0024 J**
Anthracene	0.0002	mg/L	**0.0027**	**0.01**	0.01 U	**0.0088 J**	**0.014**	**0.01**	**0.011**	**0.0086 J**	**0.0086 J**	**0.018**
Benz(a)anthracene	0.0001	mg/L	0.0002 U	**0.00054**	0.01 U	**0.0012 J**	0.01 U	**0.00059 J**	**0.00053 J**	**0.0007 J**	**0.00064 J**	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	**0.00094 J**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	**0.00038**	0.01 U	**0.0014 J**	0.01 U	**0.00049 J**	0.01 U	**0.0007 J**	**0.00057 J**	**0.0034 J**
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	**0.00038**	**0.01**	0.01 U	**0.014**	**0.022**	**0.018**	**0.021**	**0.01**	**0.01**	**0.027**
Fluoranthene	1	mg/L	**0.0022**	**0.0087**	0.01 U	**0.0084 J**	**0.01**	**0.0099 J**	**0.0093 J**	**0.0078 J**	**0.0077 J**	**0.016**
Fluorene	1	mg/L	**0.0072**	**0.027**	**0.012**	**0.023**	**0.034**	**0.028**	**0.033**	**0.022**	**0.022**	**0.048**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	**0.00042**	**0.0006**	0.01 U	0.01 U	**0.001 J**	**0.00065 J**	**0.00079 J**	**0.0004 J**	0.01 U	0.01 U
Phenanthrene	*	mg/L	**0.005**	**0.039**	**0.021**	**0.041**	**0.064**	**0.054**	**0.061**	**0.042**	**0.043**	**0.075**
Pyrene	1	mg/L	**0.0016**	**0.0062**	0.01 U	**0.0066 J**	**0.0072 J**	**0.0068 J**	**0.0069 J**	**0.0058 J**	**0.0054 J**	**0.013**
Inorganic Compounds												
Aluminum (fume or dust)	*	mg/L	0.2 U	0.2 U	**1.1**	**1.3**	**0.21**	0.15 U	**0.067 B**	**0.14 B**	**0.43**	**0.23**
Antimony	0.01	mg/L	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	**0.0057 B**	0.01 U	0.01 U	0.01 U	**0.0068 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.41**	**0.32**	**0.36**	**0.44**	**0.35**	**0.35**	**0.34**	**0.38**	**0.37**	**0.35**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	**0.00083 B**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00078 B**
Calcium metal	*	mg/L	**180**	**99**	**140**	**190**	**86**	**120**	**110**	**160**	**150**	**160**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	**0.0022 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	**0.0016 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	**0.0044 B**	**0.001 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.015 U	0.01 U	**0.0096 B**	**0.0056 B**	**0.0089 B**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**17**	**30**	**14**	**34**	**30**	**28**	**28**	**23**	**23**	**23**
Lead	0.015	mg/L	0.005 U	0.005 U	**0.009**	**0.0097**	0.005 U	0.005 U	**0.0015 B**	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**36**	**35**	**32**	**37**	**31**	**33**	**32**	**33**	**32**	**35**
Manganese	*	mg/L	**1.4**	**1.6**	**1.3**	**2.8**	**1.1**	**1.2**	**1.2**	**1.2**	**1.2**	**1.1**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	**0.00012 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**13**	**9.6**	**10**	**9**	**9.8**	**9.4**	**9.2**	**12**	**11**	**10**
Selenium	0.05	mg/L	0.01 U	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**31**	**47**	**40**	**30**	**47**	**41**	**41**	**31**	**31**	**24**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.002 U	0.002 UW	**0.0012 BW**	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	**0.01**	**0.003 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	**0.03**	**0.028**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-10D			TLC-10S					TLC-11S							TLC-12D
		Sample Date	1/17/2002	7/18/2001	1/24/2001	1/24/2001	1/24/2001	1/17/2002	7/18/2001	7/13/2001	7/18/2003	1/15/2003	7/17/2002	4/3/2002	1/17/2002	7/12/2001	1/19/2001	1/17/2001
		Sample ID	TLC10D-011702	TLC10D-071801	TLC10D 012401	010110S 012401	TLC10S 012401	TLC10S-011702	TLC10S-071801	TLC01S-071301	TLC-11S-Q3-03	TLC11S-011503	TLC115-071702	TLC11S-040302	TLC11S-011702	TLC11S-071201	TLC11S 011901	TLC12D 011701
		Unit																
Volatile Organic Compounds																		
Acetone	4	mg/L	0.5 U	**1.2 R**	1.2 U	0.025 U	0.025 U	0.025 U	**0.025 R**	**0.031**	0.025 U	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025 UJ
Benzene	0.005	mg/L	**2.5**	**4.9**	**6.6**	**0.019**	**0.02**	**0.014**	**0.025**	**0.00011 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00023 J**	0.001 U	**0.00024 J**
Carbon Disulfide	4	mg/L	0.02 U	0.05 U	**0.025 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	--	0.001 U	0.001 U	0.001 U	**0.00049 J**
Dichloromethane	0.005	mg/L	0.1 U	0.25 U	0.25 U	0.005 U	0.005 U	**0.00046 J**	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	**0.46**	**0.87**	**1.6**	**0.0057**	**0.0057**	**0.0031**	**0.0061**	**0.00017 J**	0.001 U	0.001 U	0.001 U	**0.00022 J**	0.001 U	**0.00022 J**	**0.00042 J**	**0.036**
Toluene	1	mg/L	**0.01 J**	**0.024 J**	**0.032 J**	0.001 U	0.001 U	0.001 U	**0.0011**	**0.00058 J**	0.001 U	0.001 U	**0.00044 J**	0.001 U	**0.00071 J**	**0.0012**	**0.0046**	**0.00039 J**
Trichloroethylene	0.005	mg/L	**0.0058 J**	0.05 U	0.05 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00064 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	**0.21**	**0.4**	**0.72**	**0.0028**	**0.0029**	**0.0017 J**	**0.0049**	**0.0014 J**	0.002 U	0.002 U	0.002 U	--	0.002 U	0.002 U	0.002 U	**0.022**
Semivolatile Organic Compounds																		
2-Methylnaphthalene	*	mg/L	**0.15 J**	**0.29**	**0.46 D**	**0.0083 J**	**0.0036 J**	**0.0024 J**	**0.0022 J**	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	**0.29**
Acenaphthene	2	mg/L	**0.12 J**	**0.18**	**0.16**	**0.0058 J**	**0.0032 J**	**0.0058 J**	**0.0022 J**	0.01 U	0.01 U	**0.00031 J**	--	**0.00088 J**	--	0.01 U	**0.0018 J**	**0.14**
Acenaphthylene	0.0002	mg/L	**0.038 J**	0.05 U	0.01 U	**0.0012 J**	**0.00053 J**	**0.00091 J**	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.00035 J**	**0.003 J**
Anthracene	0.0002	mg/L	0.2 U	**0.0027 J**	**0.0029 J**	**0.0014 J**	0.01 U	**0.0012 J**	**0.00036 J**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.00097 J**	**0.009 J**
Benz(a)anthracene	0.0001	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.0013 J**	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.0014 J**	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.0015 J**	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.2 U	**0.0083 J**	**0.011**	**0.0013 J**	0.01 U	**0.001 J**	0.01 U	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	**0.012**
Fluoranthene	1	mg/L	0.2 U	0.05 U	**0.0017 J**	**0.0037 J**	**0.0012 J**	**0.0016 J**	**0.00049 J**	0.01 U	0.01 U	**0.00064 J**	--	**0.00063 J**	--	0.01 U	**0.0038 J**	**0.0057 J**
Fluorene	1	mg/L	0.2 U	**0.027 J**	**0.034**	**0.0054 J**	**0.0018 J**	**0.0046 J**	**0.0014 J**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.00051 J**	**0.048**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	**1.6**	**3.3 D**	**3.6 D**	**0.025**	**0.018**	**0.012**	**0.028**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	**0.97 D**
Phenanthrene	*	mg/L	**0.027 J**	**0.029 J**	**0.037**	**0.012**	**0.0023 J**	**0.0089 J**	**0.002 J**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.003 J**	**0.046**
Pyrene	1	mg/L	0.2 U	0.05 U	**0.0018 J**	**0.0041 J**	**0.0017 J**	**0.0015 J**	0.01 U	0.01 U	0.01 U	**0.0011 J**	--	**0.00098 J**	--	0.01 U	**0.0052 J**	**0.0048 J**
Inorganic Compounds																		
Aluminum (fume or dust)	*	mg/L	0.2 U	**0.47**	**5.8**	**5.3**	**4.6**	**6.8**	**0.21**	--	**2**	**0.20 B**	--	--	--	**0.1 B**	**3.4**	**0.12 J**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.020 U	--	--	--	**0.013 B**	0.02 U	**0.0059 J**
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	**0.0046 B**	**0.0047 B**	**0.005 B**	0.01 U	--	0.01 U	0.010 U	--	--	--	**0.0041 B**	**0.0073 B**	0.01 U
Barium	2	mg/L	**0.39**	**0.36**	**0.34**	**0.27**	**0.26**	**0.29**	**0.15**	--	**0.23**	**0.11**	--	--	--	**0.1**	**0.1**	**0.25**
Beryllium	0.004	mg/L	**0.0009 B**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.0040 U	--	--	--	0.004 U	0.004 U	0.00082 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0050 U	--	--	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**40**	**44**	**43**	**110**	**100**	**86**	**69**	--	**59**	**44**	--	--	--	**41**	**29**	**15**
Chromium	0.1	mg/L	0.01 U	0.01 U	**0.011**	**0.0054 B**	**0.0052 B**	**0.0075 B**	0.01 U	--	0.01 U	0.010 U	--	--	--	0.01 U	**0.005 B**	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	**0.0016 B**	**0.0027 B**	**0.0023 B**	**0.0025 B**	0.01 U	--	0.01 U	**0.0021 B**	--	--	--	**0.0024 B**	**0.0014 B**	**0.0046 J**
Copper	1.3	mg/L	0.02 U	0.02 U	**0.0032 B**	**0.0074 B**	**0.0088 B**	**0.012 B**	0.0022 U	--	0.02 U	0.0028 U	--	--	--	**0.019 B**	**0.027**	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	**0.076**	**0.042**	**0.091**	**0.045**	--	0.015 U	0.010 UJ	--	--	--	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**25**	**27**	**30**	**55**	**56**	**50**	**27**	--	**19**	**3.1**	--	--	--	**1.5**	**6.4 N**	**44**
Lead	0.015	mg/L	0.005 U	0.005 U	**0.0019 B**	**0.013**	**0.014**	**0.021**	0.0016 U	--	**0.009**	0.0016 U	--	--	--	**0.0028 B**	**0.036**	0.0023 U
Magnesium	*	mg/L	**22**	**24**	**23**	**14**	**13**	**12**	**8.9**	--	**23**	**13**	--	--	--	**7.2**	**8.4**	**8.9**
Manganese	*	mg/L	**2.8 N**	**2.5**	**2.2**	**1.3**	**1.3**	**0.98**	**0.73**	--	**3.9**	**1.1**	--	--	--	**0.69**	**0.63**	**2.3**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.00020 U	0.00020 U	0.00020 U	0.0002 U	0.0002 U	--	0.0002 U	0.00020 U	--	--	--	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.040 U	--	--	--	**0.0055 B**	0.04 U	0.04 U
Potassium	*	mg/L	**11 N**	**11**	**10**	**6.0**	**5.8**	**5.9**	**5.3**	--	**3.2**	**3.1**	--	--	--	**3.9**	**3.0**	**4.1**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.02**	0.010 U	--	--	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**80**	**87**	**86**	**10**	**10**	**9.5**	**9.1**	--	**9.4**	**5.6**	--	--	--	**3.9**	**4.6**	**17**
Thallium	0.002	mg/L	0.002 U	0.002 U	0.002 U	0.002 UW	0.002 UW	0.002 UW	0.002 U	--	0.002 U	0.0020 UJ	--	--	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	**0.01**	**0.011**	**0.0089 B**	**0.015**	0.01 U	--	**0.01**	0.010 U	--	--	--	0.01 U	**0.0059 B**	**0.0028 J**
Zinc	2	mg/L	0.02 U	0.02 U	**0.017 B**	**0.029**	**0.04**	**0.023**	0.02 U	--	**0.03**	**0.0092 B**	--	--	--	**0.049**	**0.030**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-12S	TLC-13D								TLC-13S		
		Sample Date	1/17/2001	7/13/2004	1/22/2004	7/20/2003	1/16/2003	7/15/2002	1/15/2002	7/17/2001	1/19/2001	1/15/2002	7/17/2001	1/19/2001
		Sample ID	TLC12S 011701	TLC-13D-Q3-04	TLC-13D-Q1-04	TLC-13D-Q3-03	TLC13D-011603	TLC13D-071502	TLC13D-011502	TLC13D-071701	TLC13D 011901	TLC13S-011502	TLC13S-071701	TLC13S 011901
		Unit												
Volatile Organic Compounds														
Acetone	4	mg/L	0.025 UJ	0.025 U	0.025 U	0.025 U	**0.014 J**	0.025 U	0.025 U	0.025 U	0.025 U	**0.3**	**0.016 J**	0.025 U
Benzene	0.005	mg/L	**0.015**	0.001 U	0.001 U	**0.047**	0.001 U	0.001 U	0.001 U	**0.0002 J**	0.001 U	0.001 U	**0.00024 J**	0.001 U
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00046 J**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.0012 U	0.001 U	0.001 U	0.001 U	**0.00014 J**	0.001 U	0.001 U	**0.00057 J**	0.001 U	0.001 U	**0.0006 J**	0.001 U
Toluene	1	mg/L	**0.00055 J**	0.001 U	0.001 U	**0.046**	**0.00035 J**	**0.00054 J**	0.001 U	**0.00035 J**	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	**0.044**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	**0.0081**	0.002 U	0.002 U	0.002 U	**0.00046 J**	0.002 U	0.002 U	**0.00068 J**	0.002 U	0.002 U	**0.00064 J**	0.002 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	mg/L	**0.0046 J**	**0.0004**	**0.0014**	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Acenaphthene	2	mg/L	**0.11**	**0.0012**	**0.0024**	0.01 U	--	**0.0003 J**	--	**0.001 J**	**0.0012 J**	--	--	--
Acenaphthylene	0.0002	mg/L	**0.0017 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Anthracene	0.0002	mg/L	**0.0076 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benz(a)anthracene	0.0001	mg/L	**0.0048 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(a)pyrene	0.0002	mg/L	**0.0049 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(b)fluoranthene	0.0002	mg/L	**0.0031 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(g,h,i)perylene	0.0002	mg/L	**0.0032 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(k)fluoranthene	0.0002	mg/L	**0.0036 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Chrysene	0.0002	mg/L	**0.0046 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Dibenzofuran	0.001	mg/L	**0.027**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Fluoranthene	1	mg/L	**0.03**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	**0.0004 J**	--	--	--
Fluorene	1	mg/L	**0.037**	0.0002 U	**0.00034**	0.01 U	--	0.01 U	--	**0.00073 J**	0.01 U	--	--	--
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	**0.0021 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	**0.00063 J**	0.01 U	--	--	--
Naphthalene	0.02	mg/L	**0.017**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	**0.0033 J**	0.01 U	--	--	--
Phenanthrene	*	mg/L	**0.03**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	**0.00077 J**	--	--	--
Pyrene	1	mg/L	**0.023**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	**0.086 J**	**5.5**	**4.6**	**1.8**	**0.33**	**4.5**	--	**3.1 N**	**20**	--	--	--
Antimony	0.01	mg/L	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	--	0.02 U	**0.013 B**	--	--	--
Arsenic	0.05	mg/L	0.01 U	**0.03**	**0.027**	0.01 U	**0.095**	**0.09**	--	**0.18**	**0.15**	--	--	--
Barium	2	mg/L	**0.32**	**0.49**	**0.48**	**0.29**	**0.29**	**0.52**	--	**0.4**	**0.58**	--	--	--
Beryllium	0.004	mg/L	0.00078 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	--	0.004 U	**0.00079 B**	--	--	--
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	--	0.005 U	**0.0019 B**	--	--	--
Calcium metal	*	mg/L	**100**	**57**	**54**	**63**	**120**	**61**	--	**73**	**55**	--	--	--
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.006 B**	--	**0.0032 B**	**0.021**	--	--	--
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	**0.0041 B**	**0.0093 B**	--	**0.0069 B**	**0.016**	--	--	--
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	**0.0013 B**	**0.0097 B**	--	**0.0039 B**	**0.025**	--	--	--
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.015 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Iron	*	mg/L	**35**	**63**	**65**	**36**	**27**	**65 N**	--	**52**	**71 N**	--	--	--
Lead	0.015	mg/L	0.0028 U	**0.013**	**0.013**	**0.005**	**0.0021 B**	**0.018**	--	**0.0091**	**0.062**	--	--	--
Magnesium	*	mg/L	**27**	**28**	**28**	**28**	**44**	**30**	--	**34**	**30**	--	--	--
Manganese	*	mg/L	**1.3**	**3.7**	**3.3**	**1.2**	**0.97**	**2.5**	--	**1.7**	**2.3**	--	--	--
Mercury	0.002	mg/L	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	--	0.0002 U	0.00020 U	--	--	--
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	--	0.04 U	**0.012 B**	--	--	--
Potassium	*	mg/L	**14**	**14**	**13**	**24**	**21**	**15**	--	**19**	**14**	--	--	--
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	--	0.01 U	0.01 U	--	--	--
Sodium	*	mg/L	**22**	**170**	**180**	**210**	**170**	**220**	--	**200**	**270**	--	--	--
Thallium	0.002	mg/L	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	--	0.002 UN	0.002 U	--	--	--
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	**0.011**	0.01 U	0.010 U	**0.0075 B**	--	**0.0047 B**	**0.031**	--	--	--
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.023**	--	**0.016 B**	**0.072**	--	--	--

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-14D					TLC-14S		
		Sample Date	4/3/2002	1/15/2002	7/10/2001	1/22/2001	1/22/2001	1/15/2002	7/11/2001	1/23/2001
		Sample ID	TLC14D-040302	TLC14D-011502	TLC14D-071001	010114D 012201	TLC14D	TLC14S-011502	TLC14S-071101	TLC14S 012301
		Unit								
Volatile Organic Compounds										
Acetone	4	mg/L	--	0.025 U	0.025 U	0.025 U	0.025 U	**0.018 J**	**0.022 J**	0.025 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon Disulfide	4	mg/L	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	**0.00027 J**	**0.00018 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	--	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Semivolatile Organic Compounds										
2-Methylnaphthalene	*	mg/L	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Acenaphthene	2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0042 J**	**0.0039 J**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0008 J**	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Dibenzofuran	0.001	mg/L	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Fluoranthene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.00077 J**	**0.00076 J**
Fluorene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0012 J**	**0.00095 J**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.005 J**	**0.0022 J**
Pyrene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0012 J**	**0.00095 J**
Inorganic Compounds										
Aluminum (fume or dust)	*	mg/L	--	**0.21 N**	**0.52**	**5.8 N**	**3.1 N**	--	--	--
Antimony	0.01	mg/L	--	0.020 U	0.02 U	0.02 U	0.02 U	--	--	--
Arsenic	0.05	mg/L	--	0.010 U	0.01 U	0.01 U	0.01 U	--	--	--
Barium	2	mg/L	--	**0.26**	**0.26**	**0.3**	**0.29**	--	--	--
Beryllium	0.004	mg/L	--	0.0040 U	0.004 U	0.004 U	0.004 U	--	--	--
Cadmium	0.005	mg/L	--	0.0050 U	0.005 U	0.005 U	0.005 U	--	--	--
Calcium metal	*	mg/L	--	**27**	**29**	**29**	**30**	--	--	--
Chromium	0.1	mg/L	--	0.010 U	0.01 U	**0.0068 B**	**0.0037 B**	--	--	--
Cobalt	*	mg/L	--	0.010 U	**0.0024 B**	**0.0029 B**	**0.0022 B**	--	--	--
Copper	1.3	mg/L	--	0.020 U	0.02 U	**0.0078 B**	**0.0049 B**	--	--	--
Cyanide	0.2	mg/L	--	0.010 U	0.01 U	0.01 U	0.01 U	--	--	--
Iron	*	mg/L	--	**12 N**	**13**	**14**	**14**	--	--	--
Lead	0.015	mg/L	--	**0.0017 B**	0.005 U	**0.011**	**0.0041 B**	--	--	--
Magnesium	*	mg/L	--	**19**	**20**	**20**	**21**	--	--	--
Manganese	*	mg/L	--	**1.7**	**1.8**	**1.8**	**1.9**	--	--	--
Mercury	0.002	mg/L	--	0.00020 U	0.00020 U	0.00020 U	0.00020 U	--	--	--
Nickel	0.1	mg/L	--	0.040 U	0.04 U	0.04 U	0.04 U	--	--	--
Potassium	*	mg/L	--	**2.7**	**2.8**	**3.0**	**2.9**	--	--	--
Selenium	0.05	mg/L	--	0.010 U	**0.0048 B**	0.01 U	0.01 U	--	--	--
Sodium	*	mg/L	--	**19**	**19**	**19**	**20**	--	--	--
Thallium	0.002	mg/L	--	0.0020 U	0.002 U	0.002 U	0.002 UW	--	--	--
Vanadium (fume or dust)	0.2	mg/L	--	0.010 U	0.01 U	**0.0069 B**	**0.0035 B**	--	--	--
Zinc	2	mg/L	--	0.020 U	0.02 U	**0.016 B**	**0.022**	--	--	--

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
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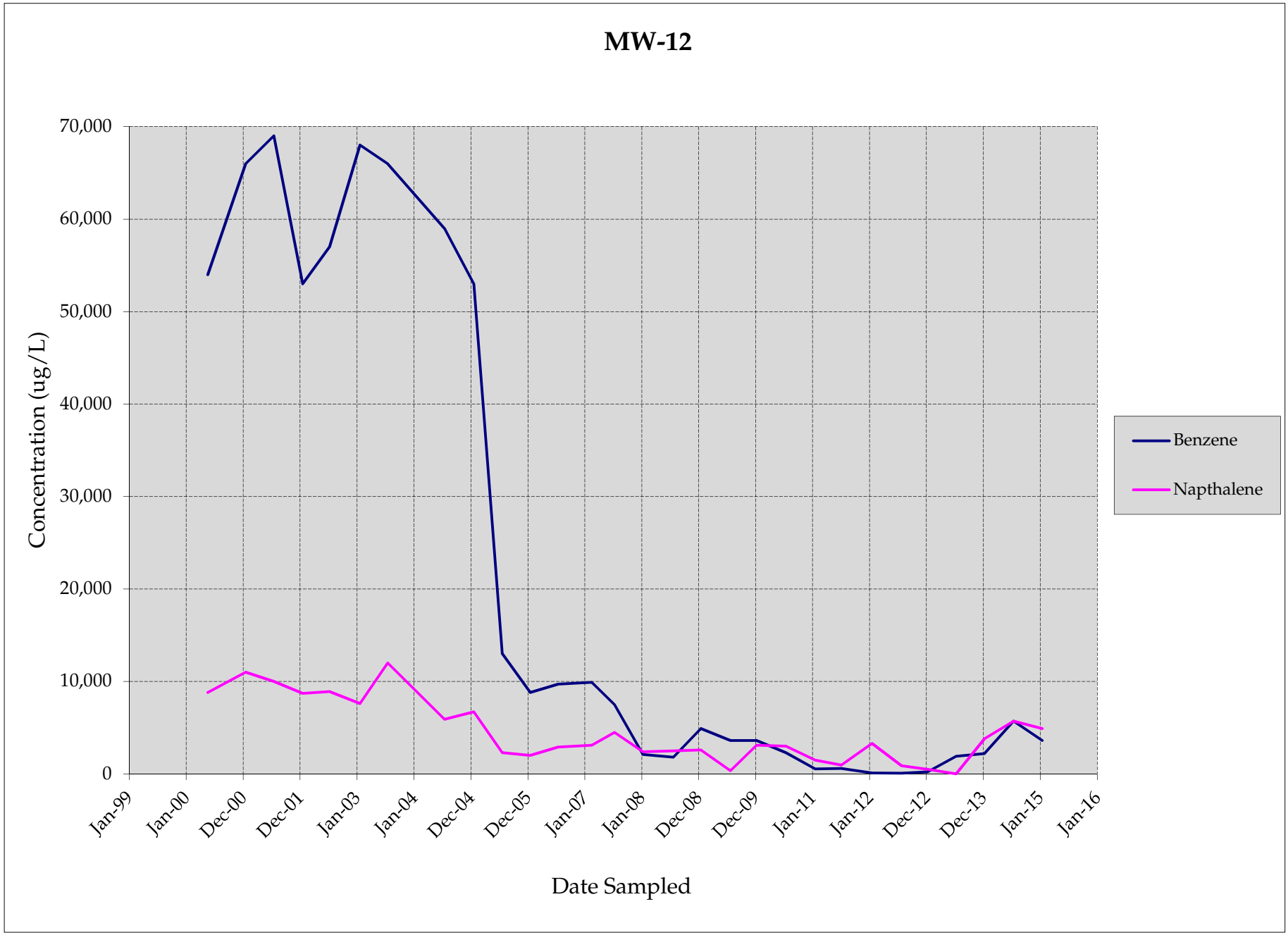
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

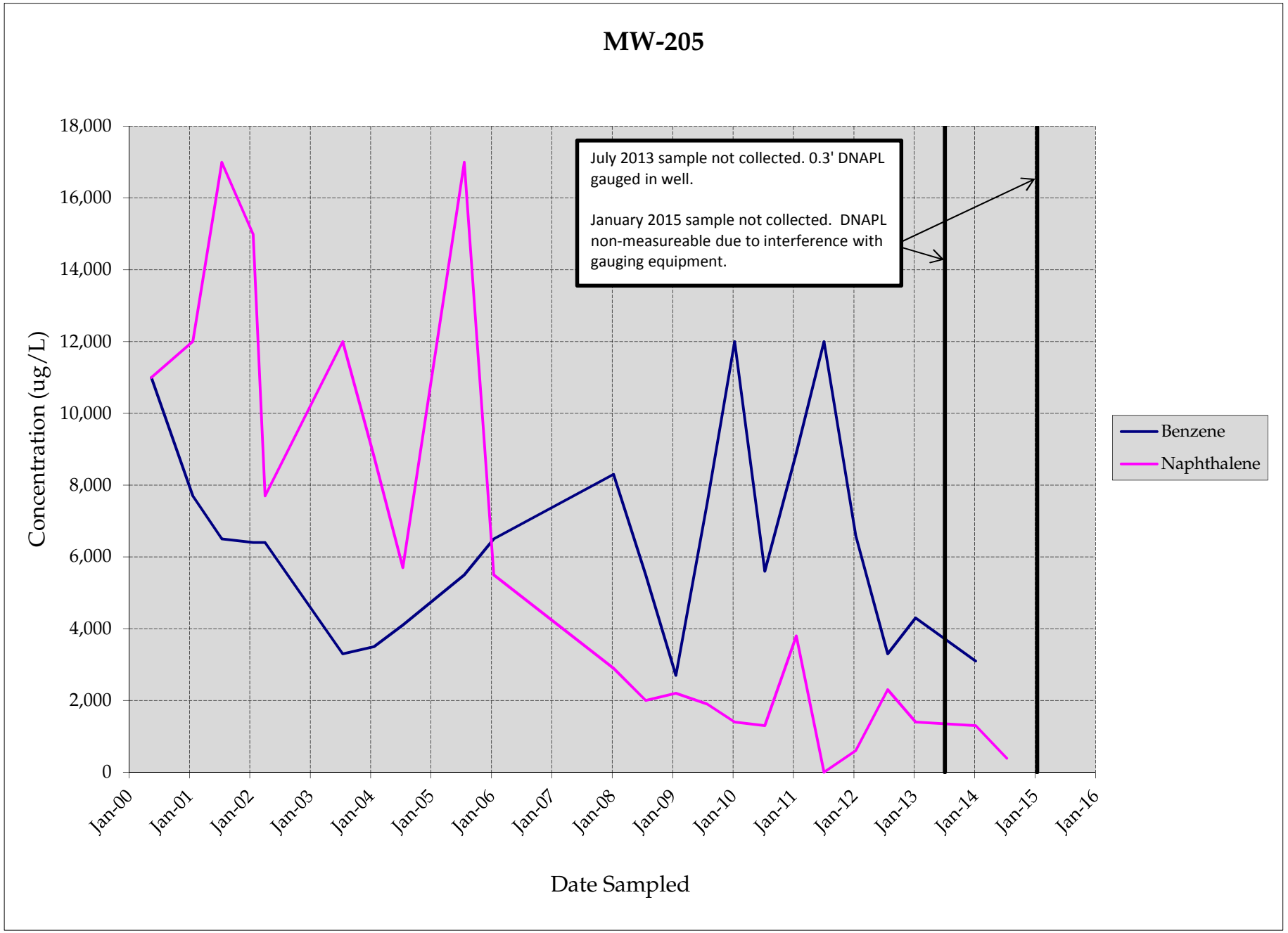
Concentration Trend Graphs

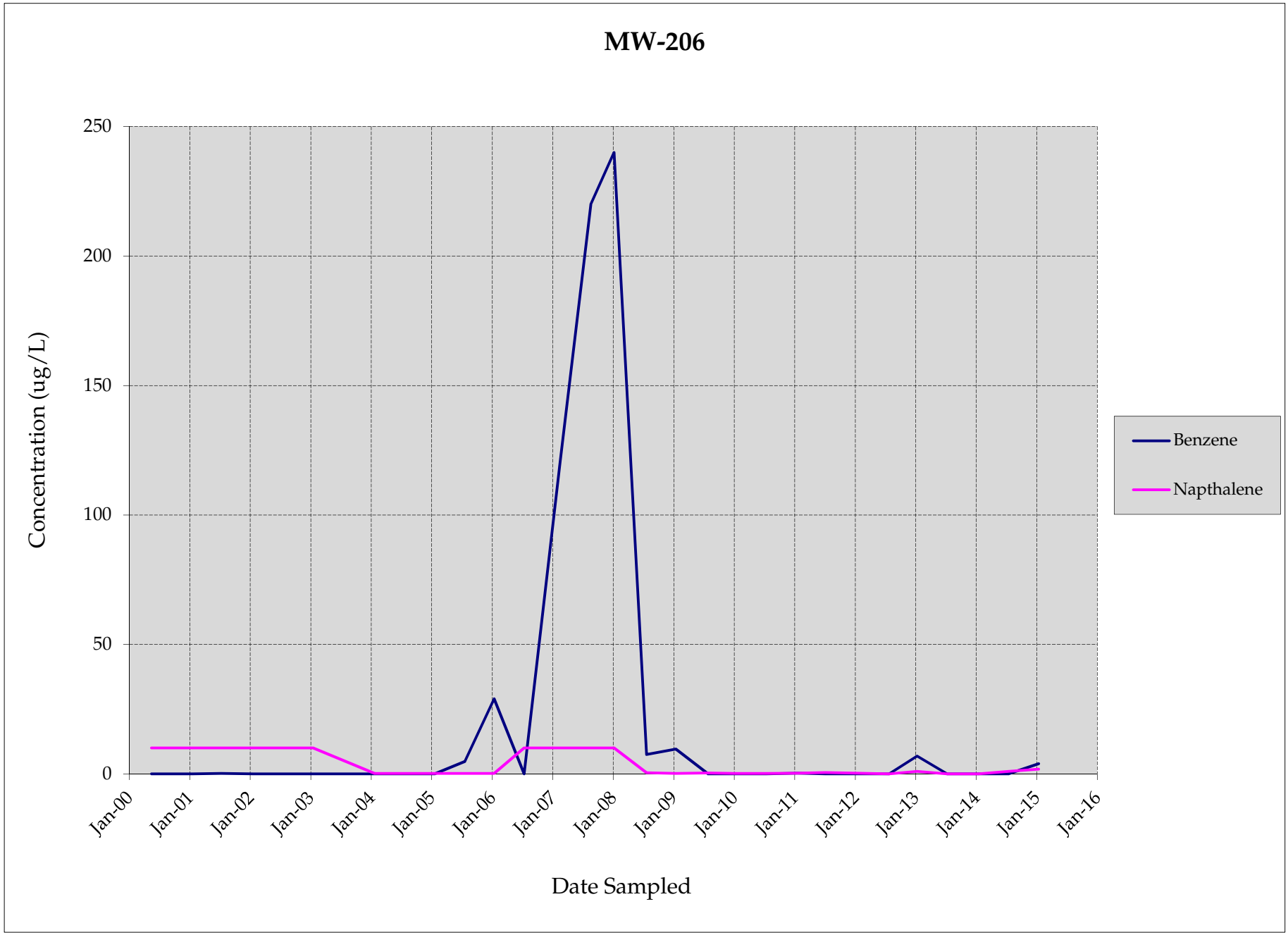
Appendix F

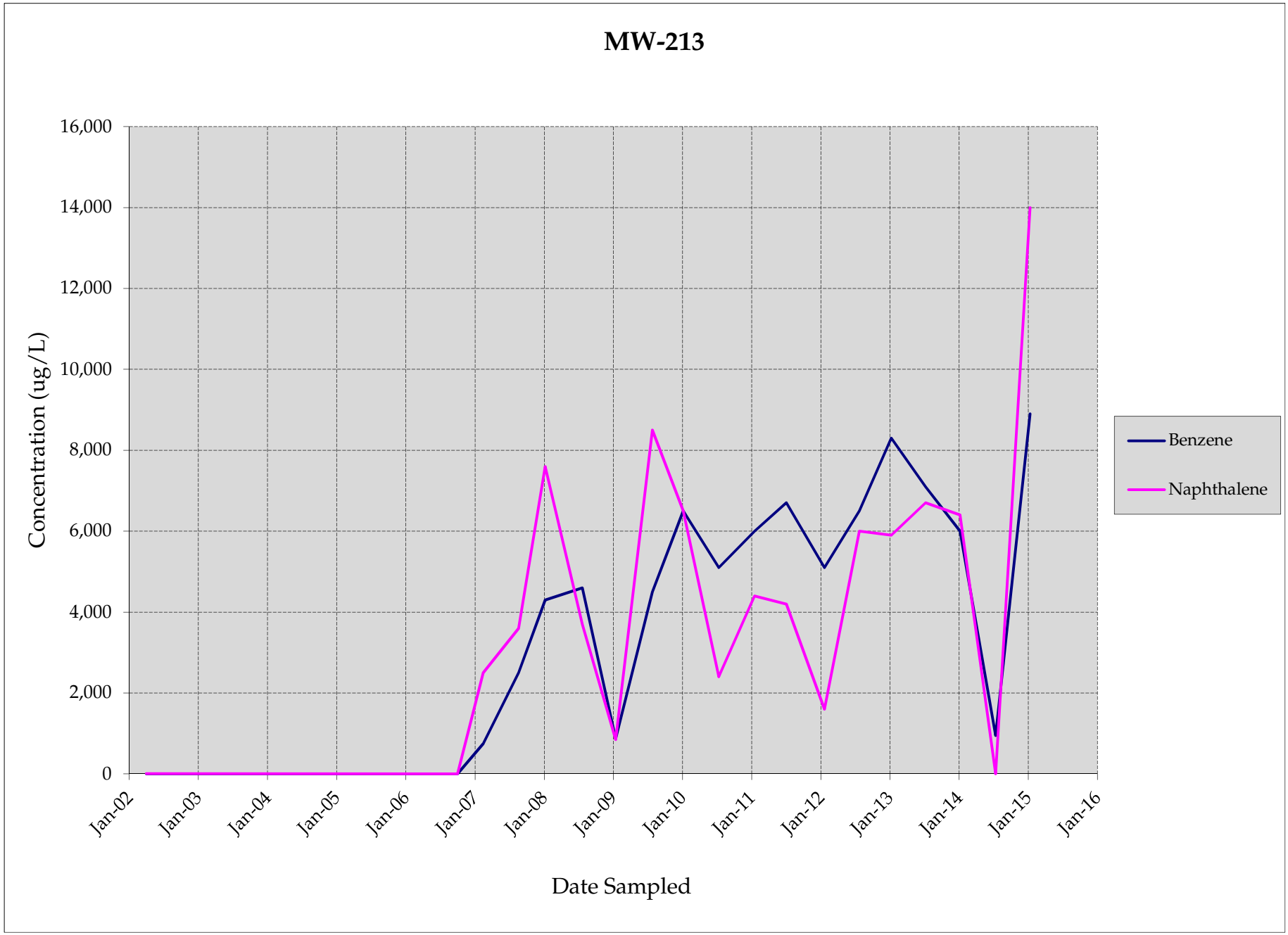
May 29, 2015
Project No. 0280918
AGL Resources

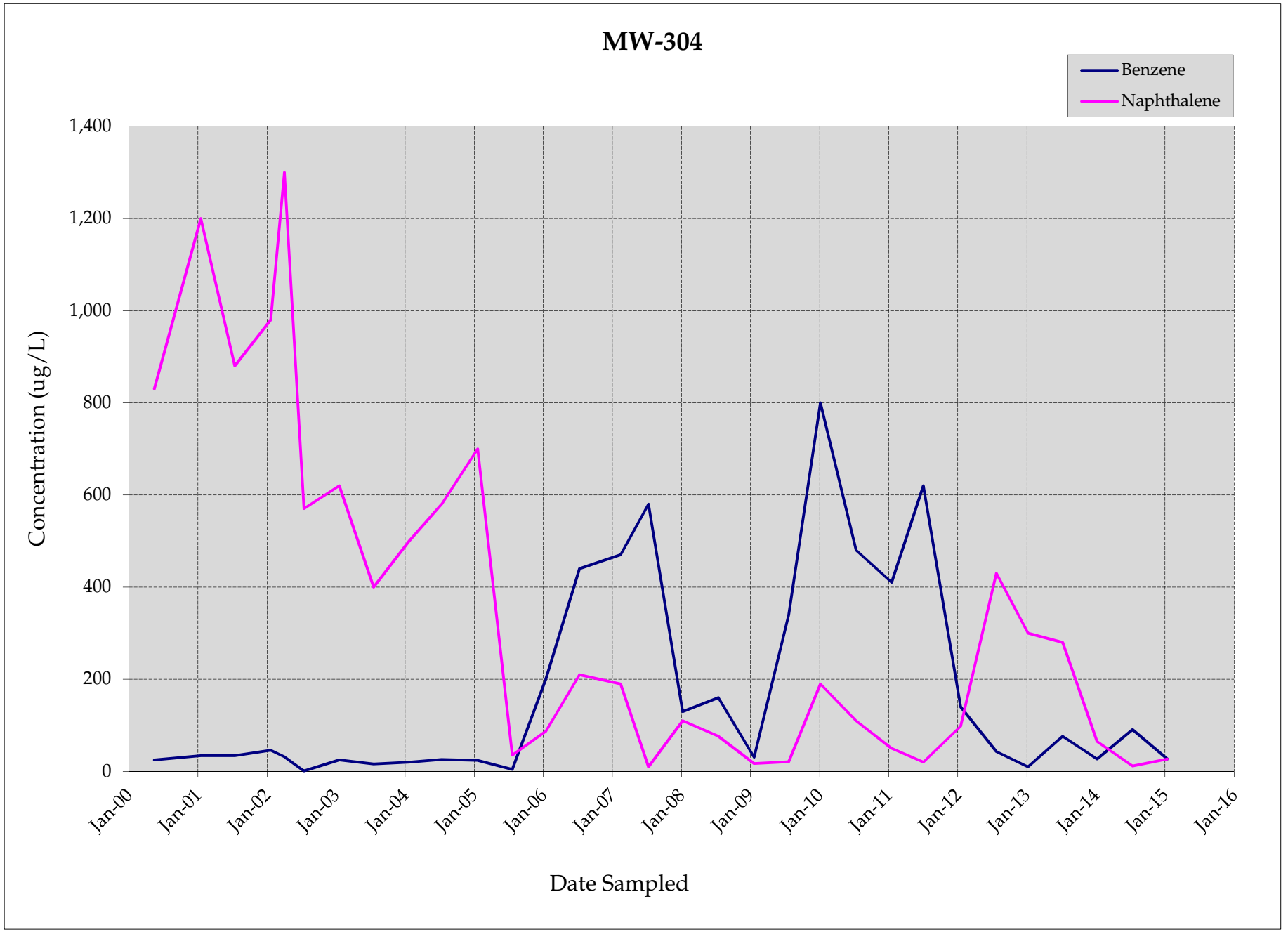
Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

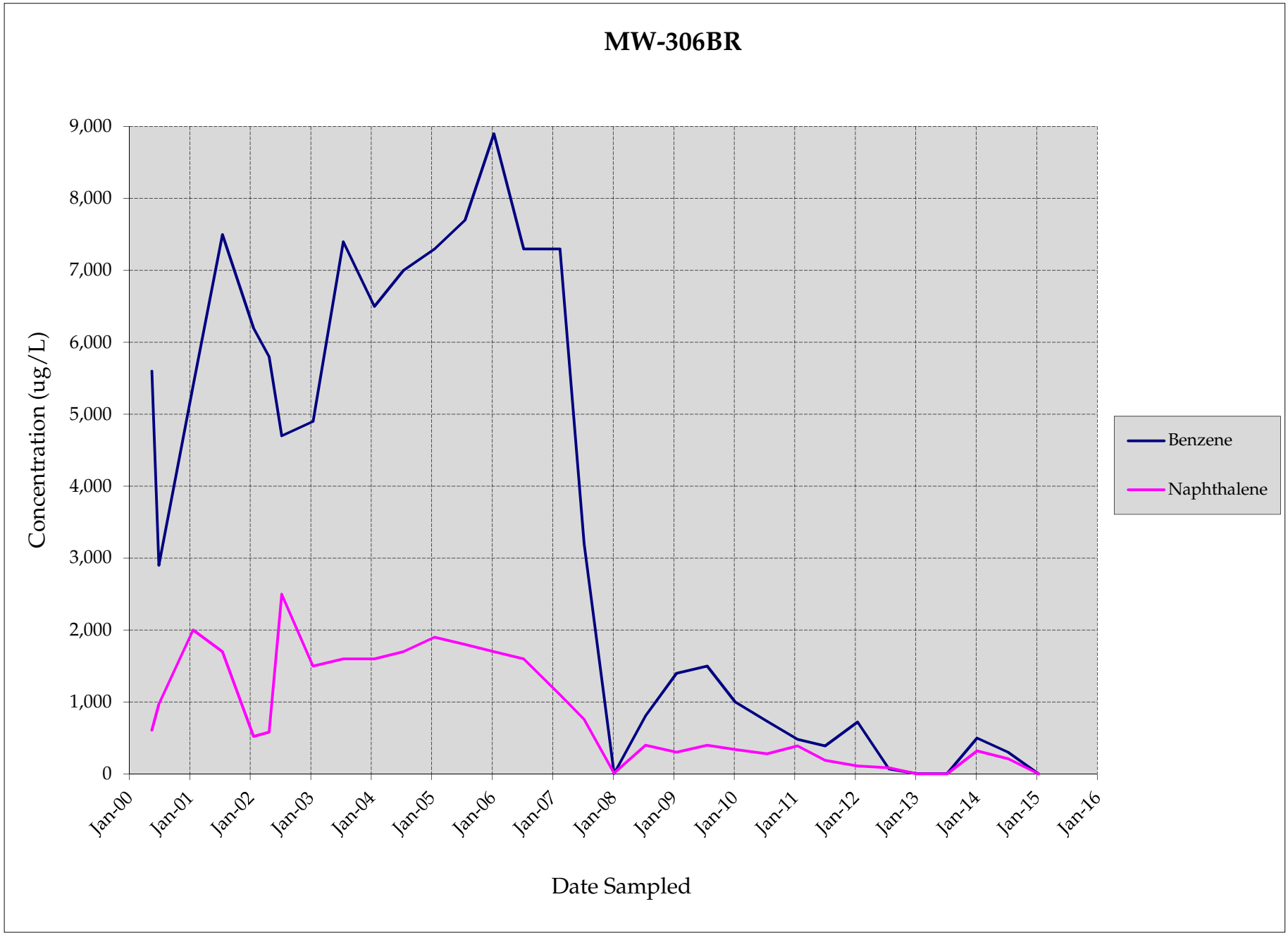

MW-12
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Concentration (ug/L)
Jan-99
Jan-00
Dec-00
Dec-01
Jan-03
Jan-04
Dec-04
Dec-05
Jan-07
Jan-08
Dec-08
Dec-09
Jan-11
Jan-12
Dec-12
Dec-13
Jan-15
Jan-16
Date Sampled
Benzene
Napthalene

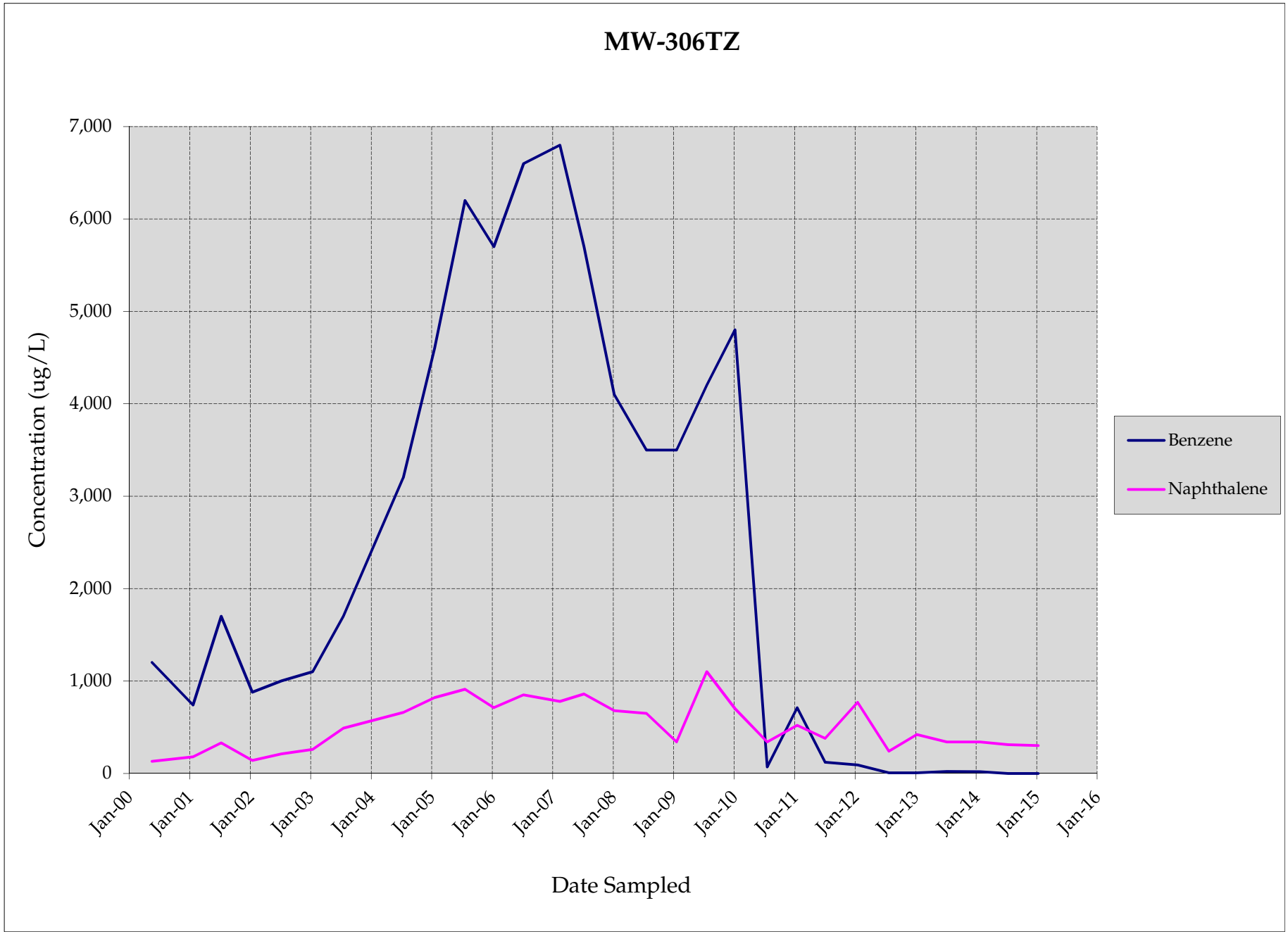

MW-205
July 2013 sample not collected. 0.3' DNAPL gauged in well.
January 2015 sample not collected. DNAPL non-measureable due to interference with gauging equipment.
Concentration (ug/L)
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

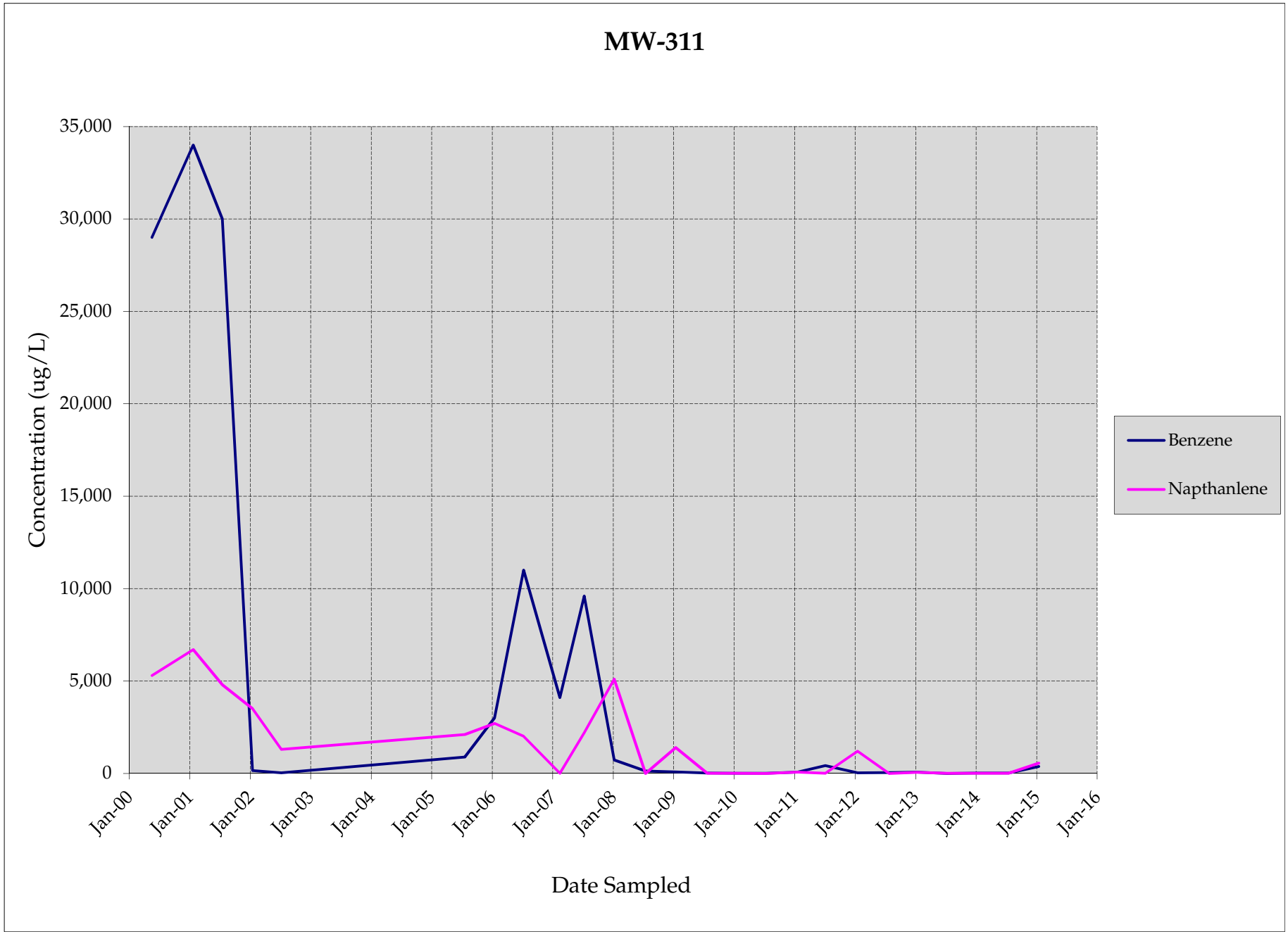

MW-206
250
200
150
100
50
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthalene

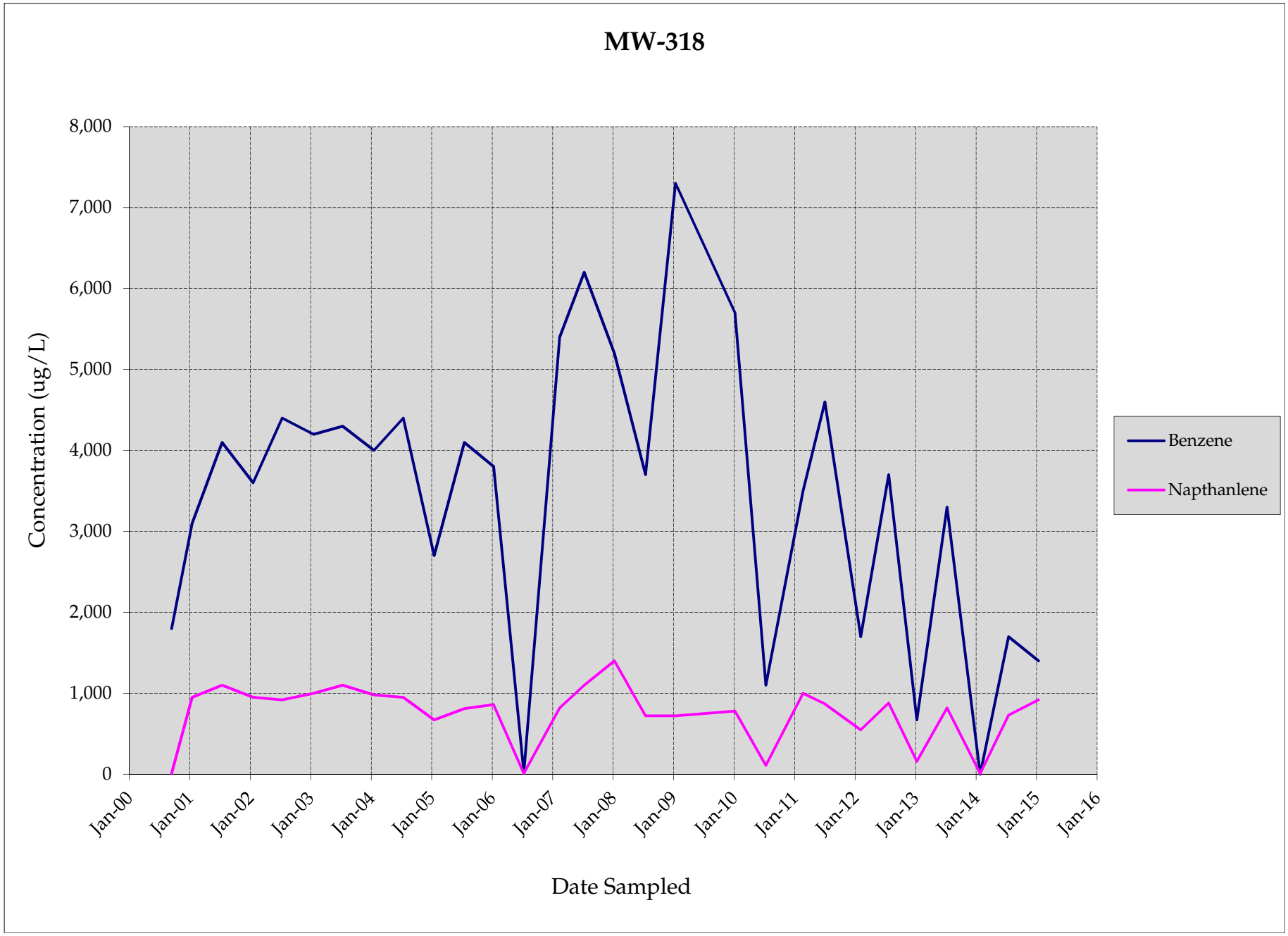

MW-213
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

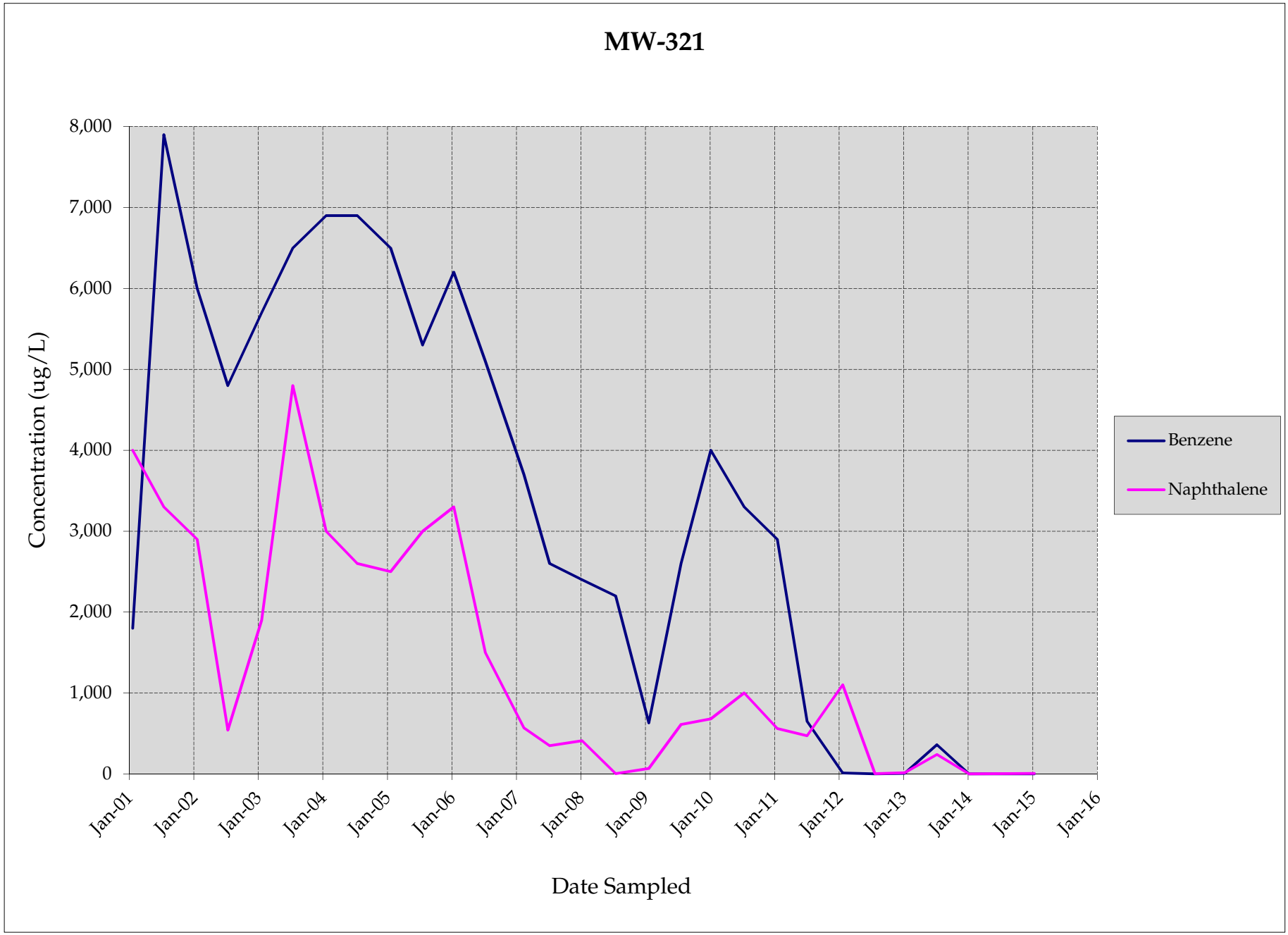

MW-304
Benzene
Naphthalene
1,400
1,200
1,000
800
600
400
200
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled

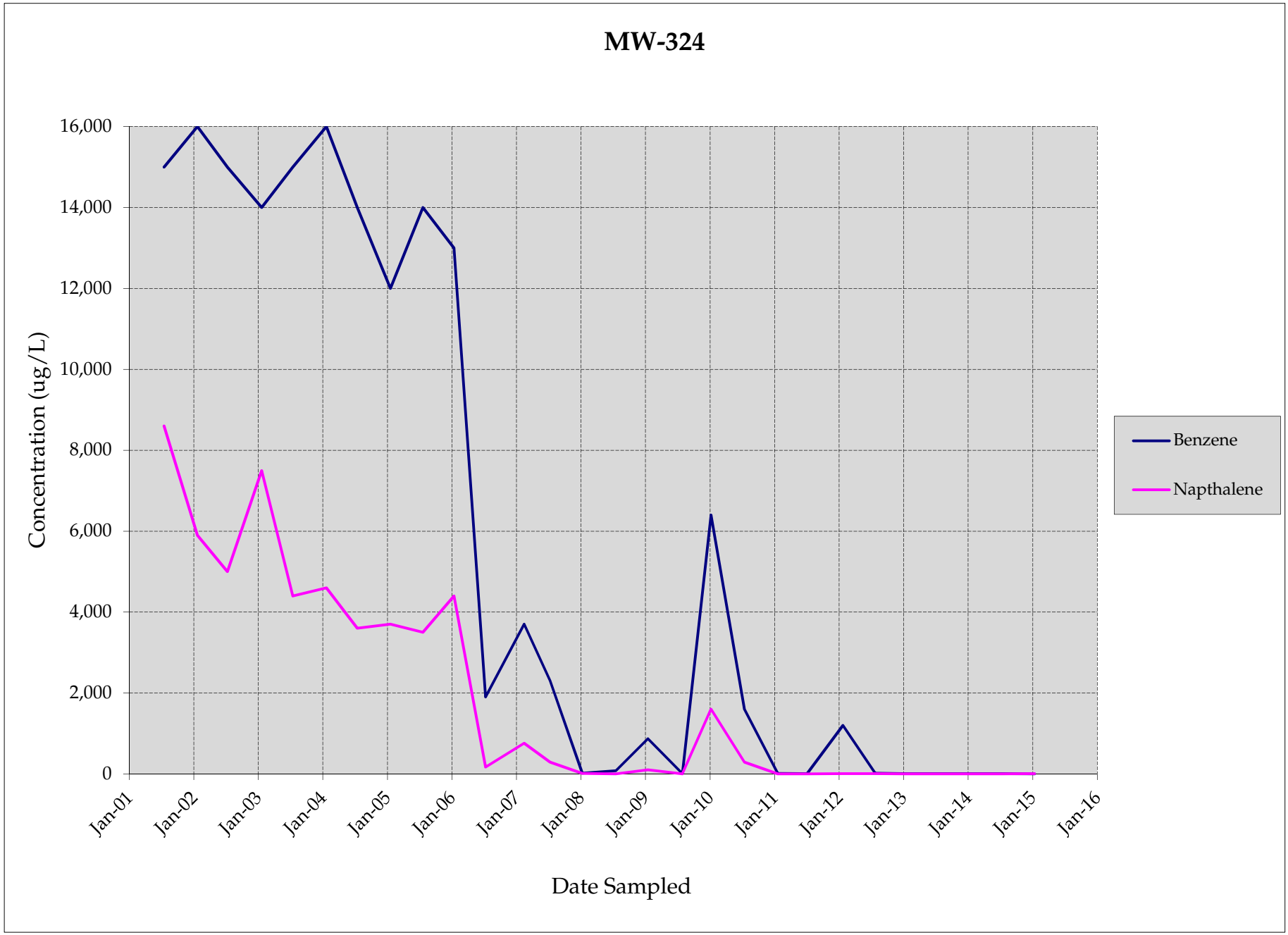

MW-306BR
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

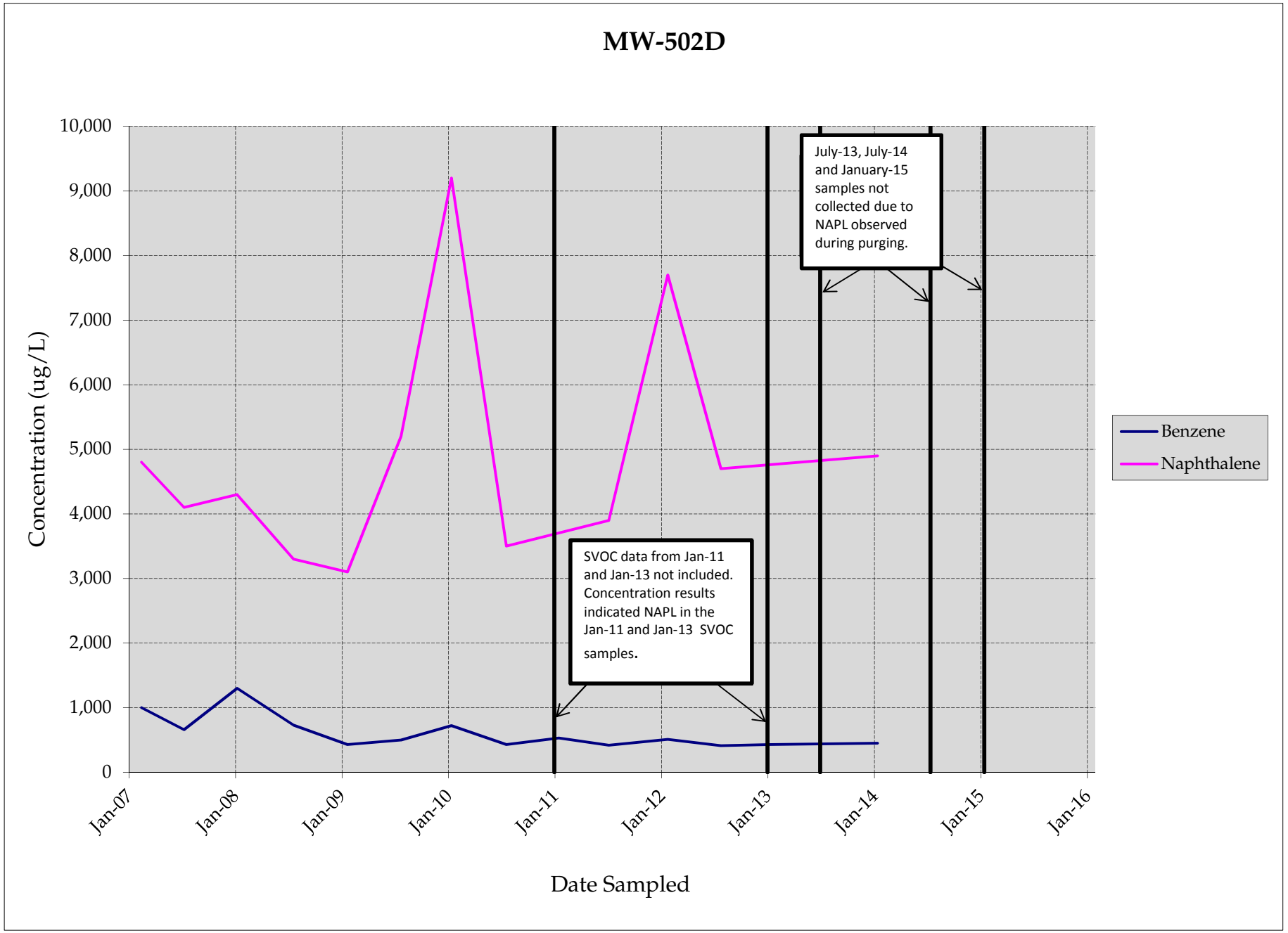

MW-306TZ
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

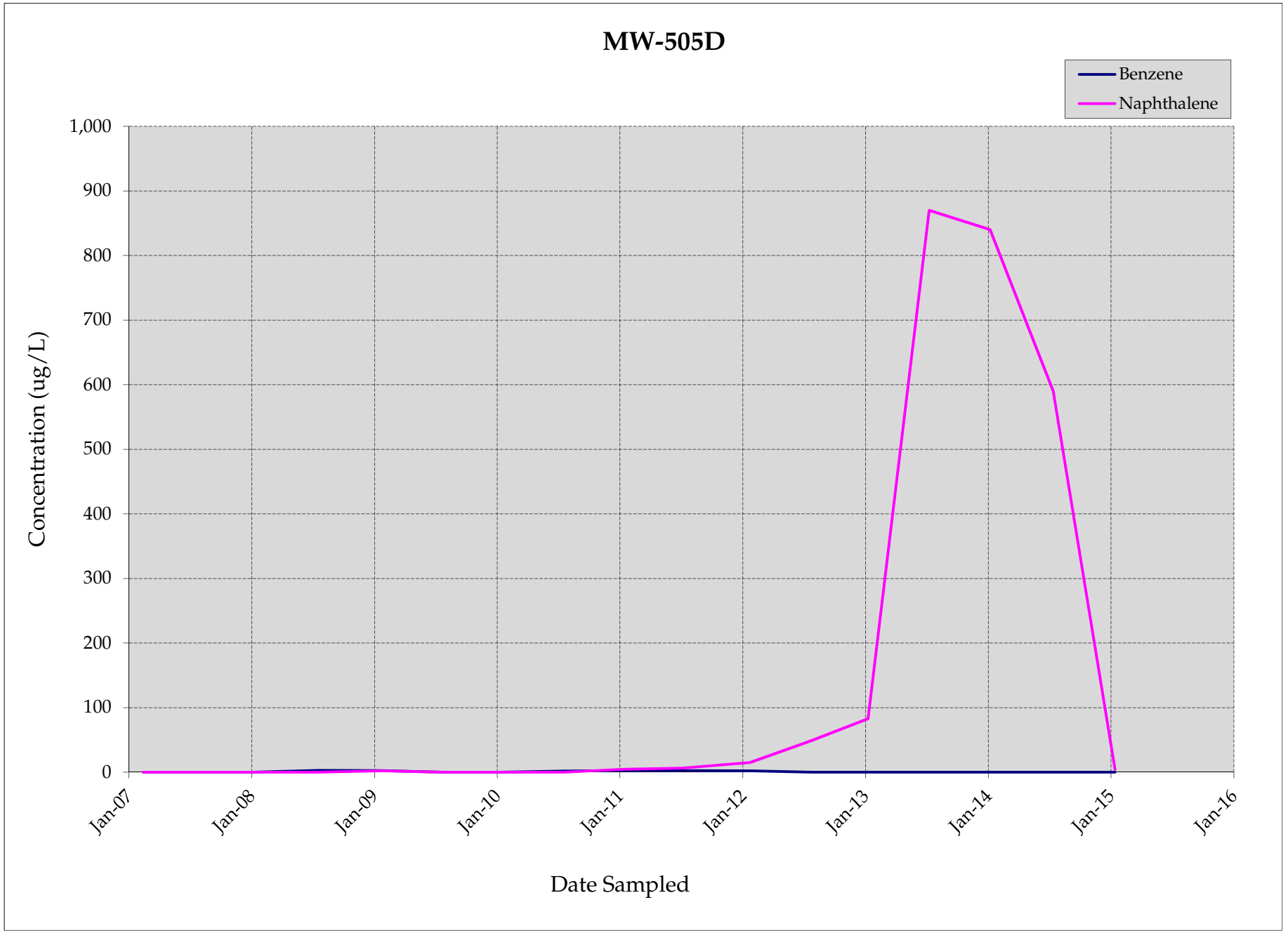

MW-311
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthanlene

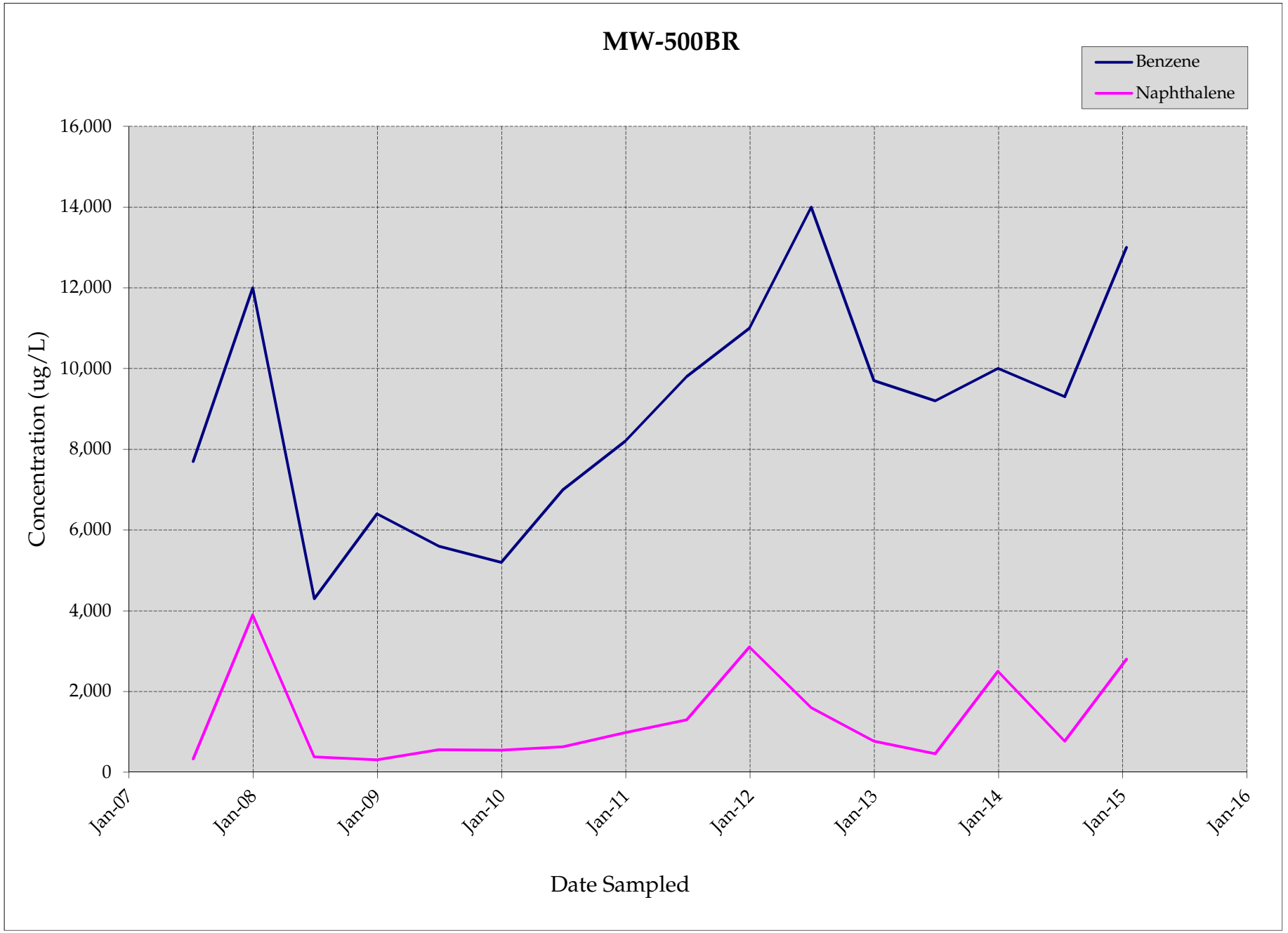

MW-318
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthanlene

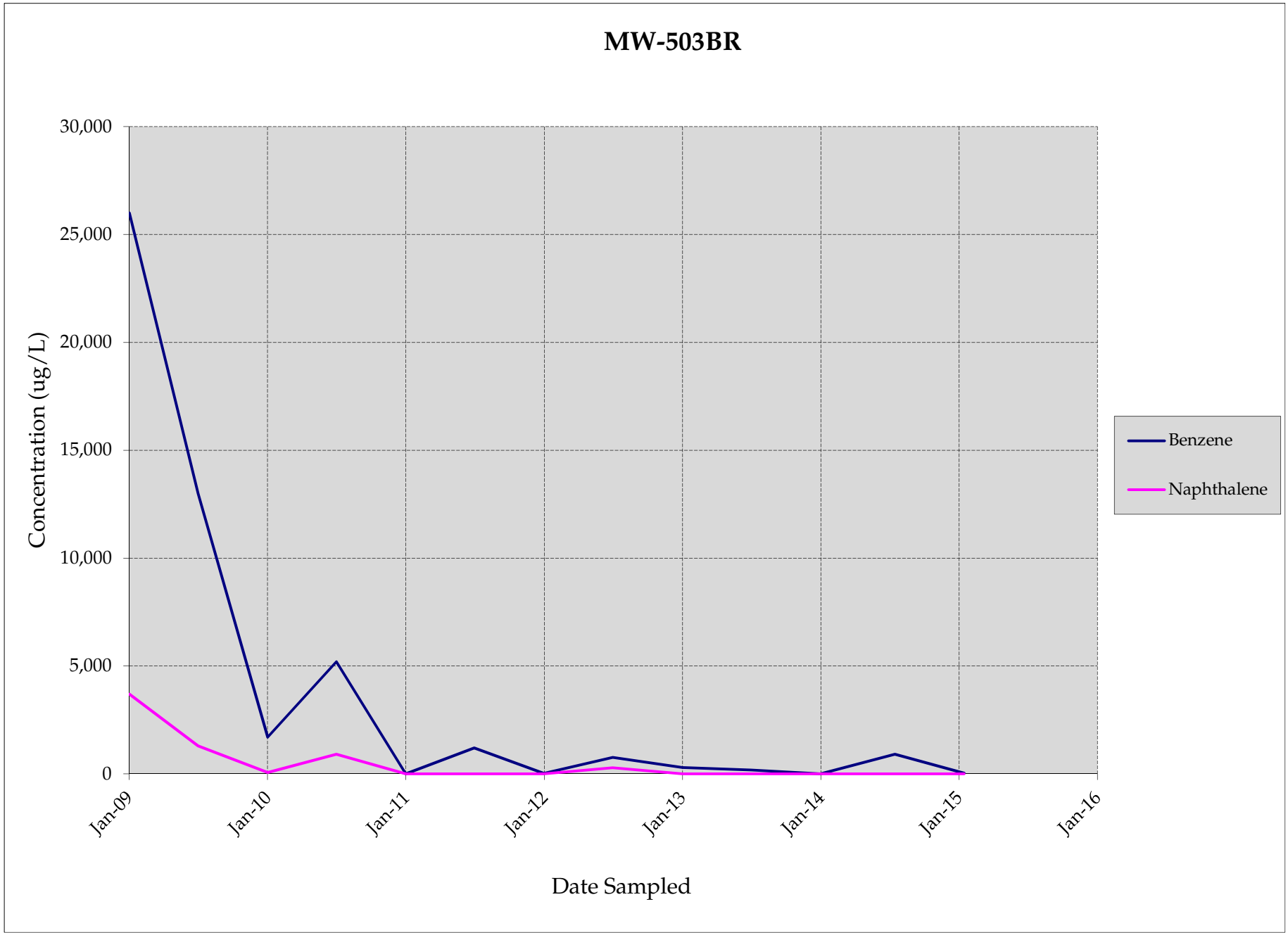

MW-321
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

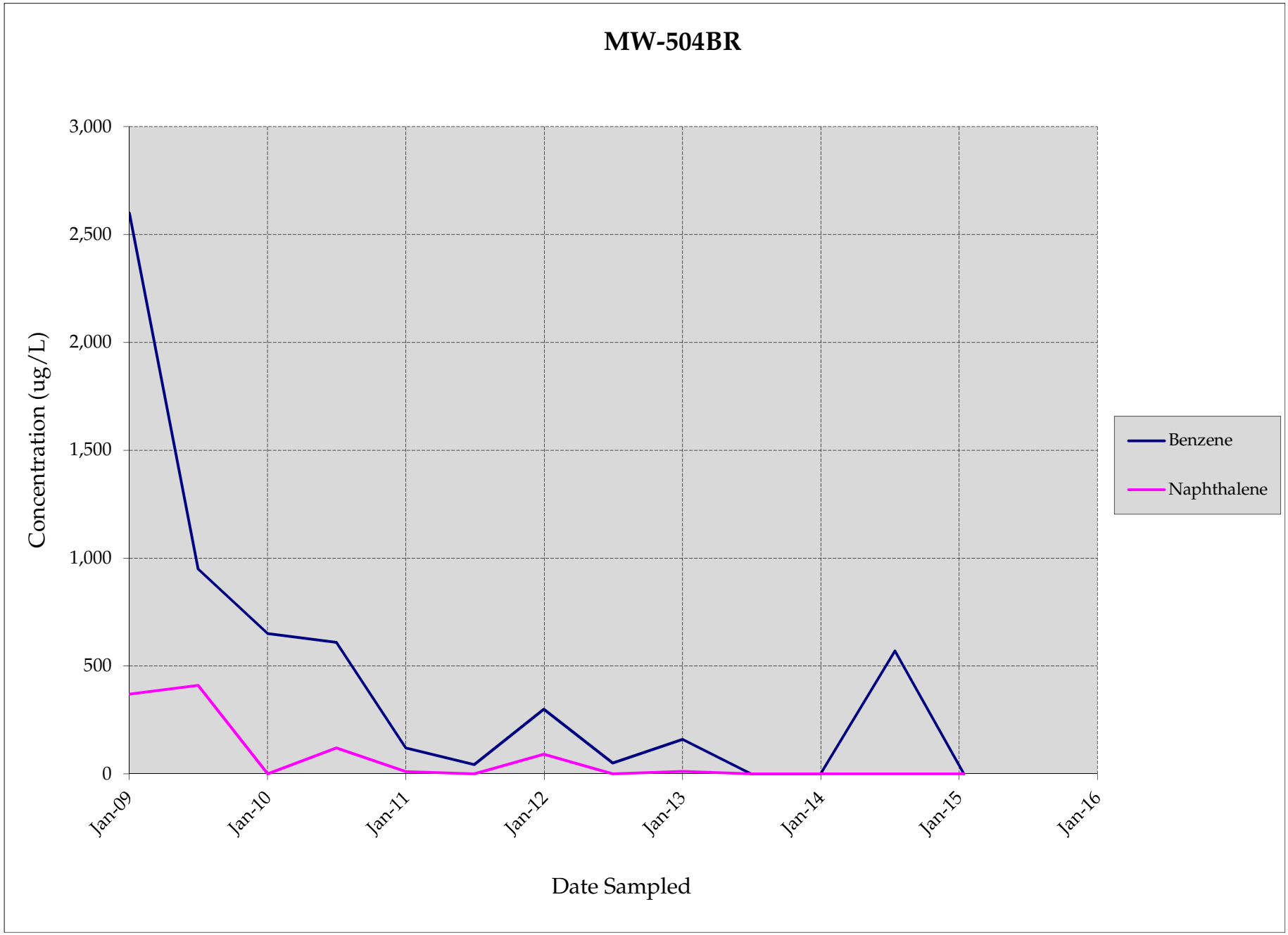

MW-324
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthalene

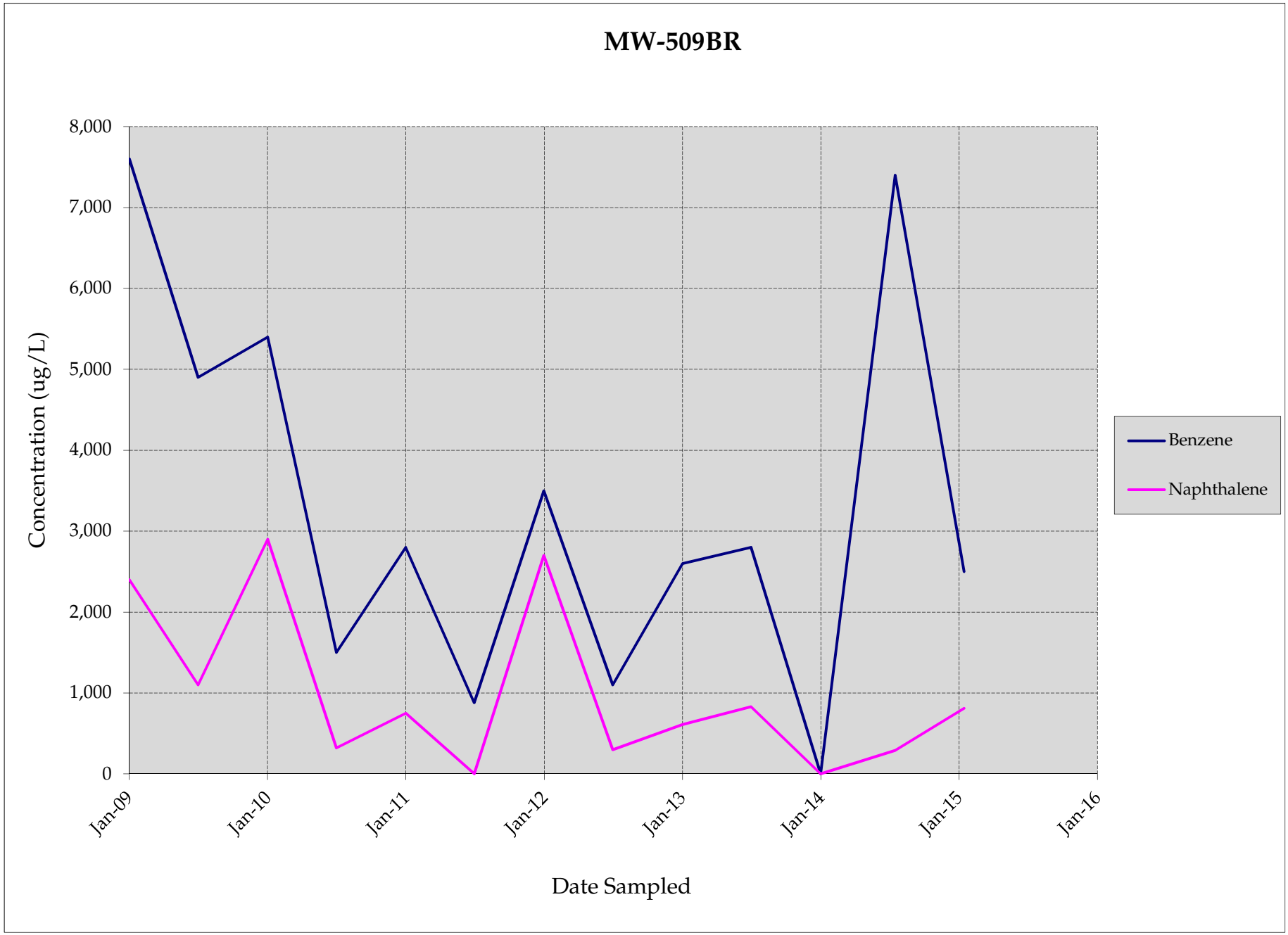

MW-502D
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
July-13, July-14 and January-15 samples not collected due to NAPL observed during purging.
SVOC data from Jan-11 and Jan-13 not included. Concentration results indicated NAPL in the Jan-11 and Jan-13 SVOC samples.
Benzene
Naphthalene

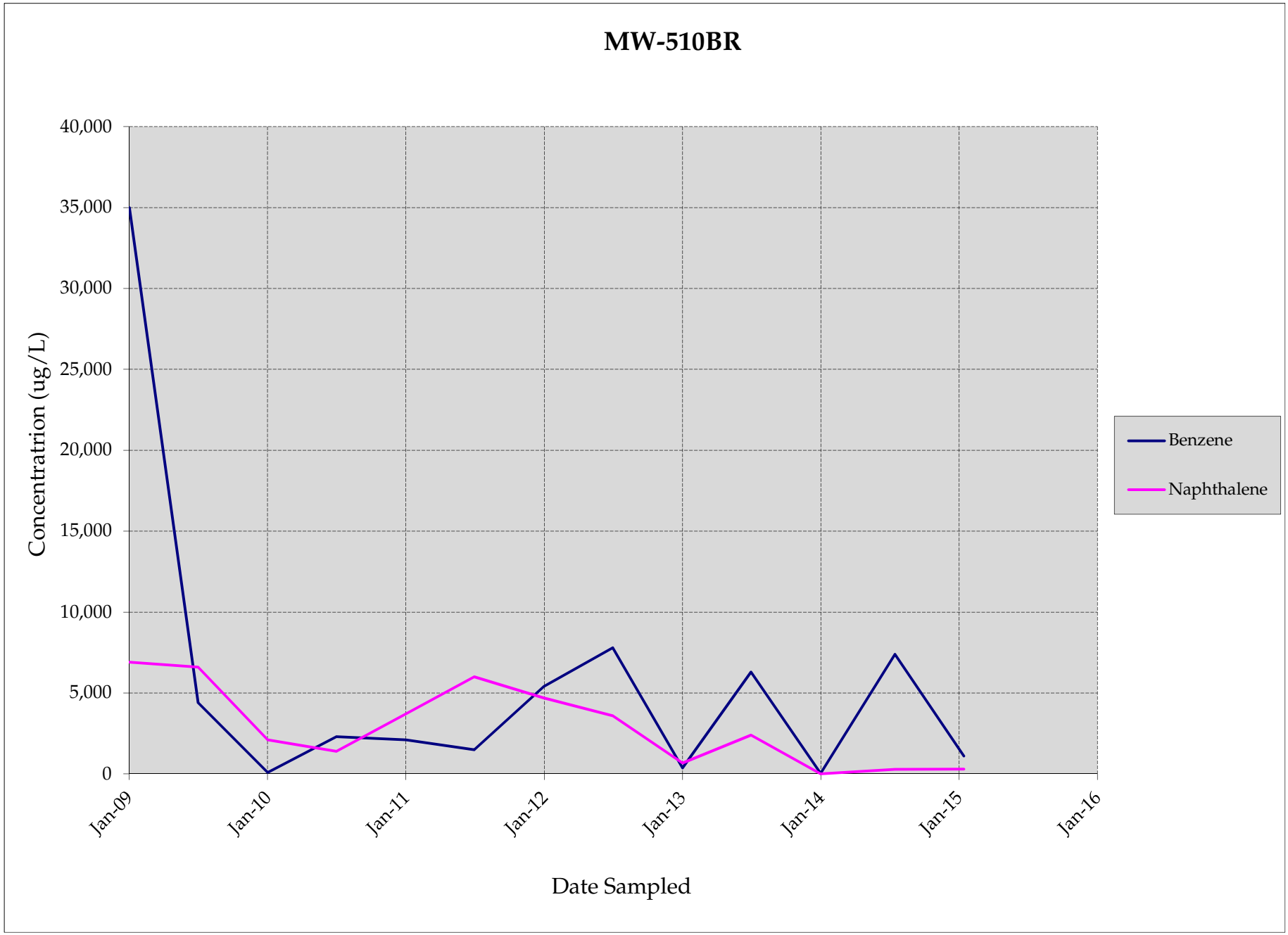

MW-505D
Benzene
Naphthalene
1,000
900
800
700
600
500
400
300
200
100
0
Concentration (ug/L)
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled

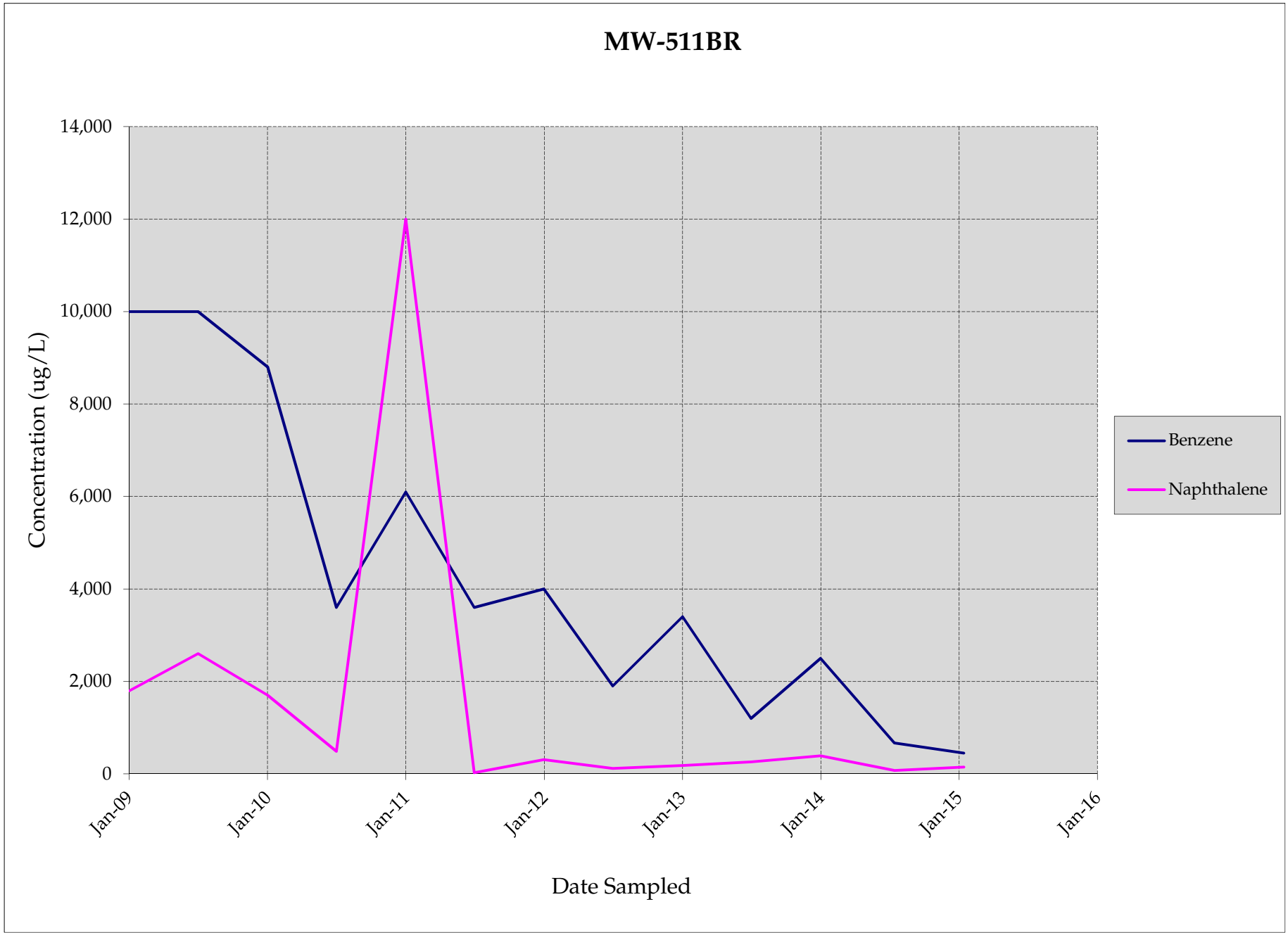

MW-500BR
Benzene
Naphthalene
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled

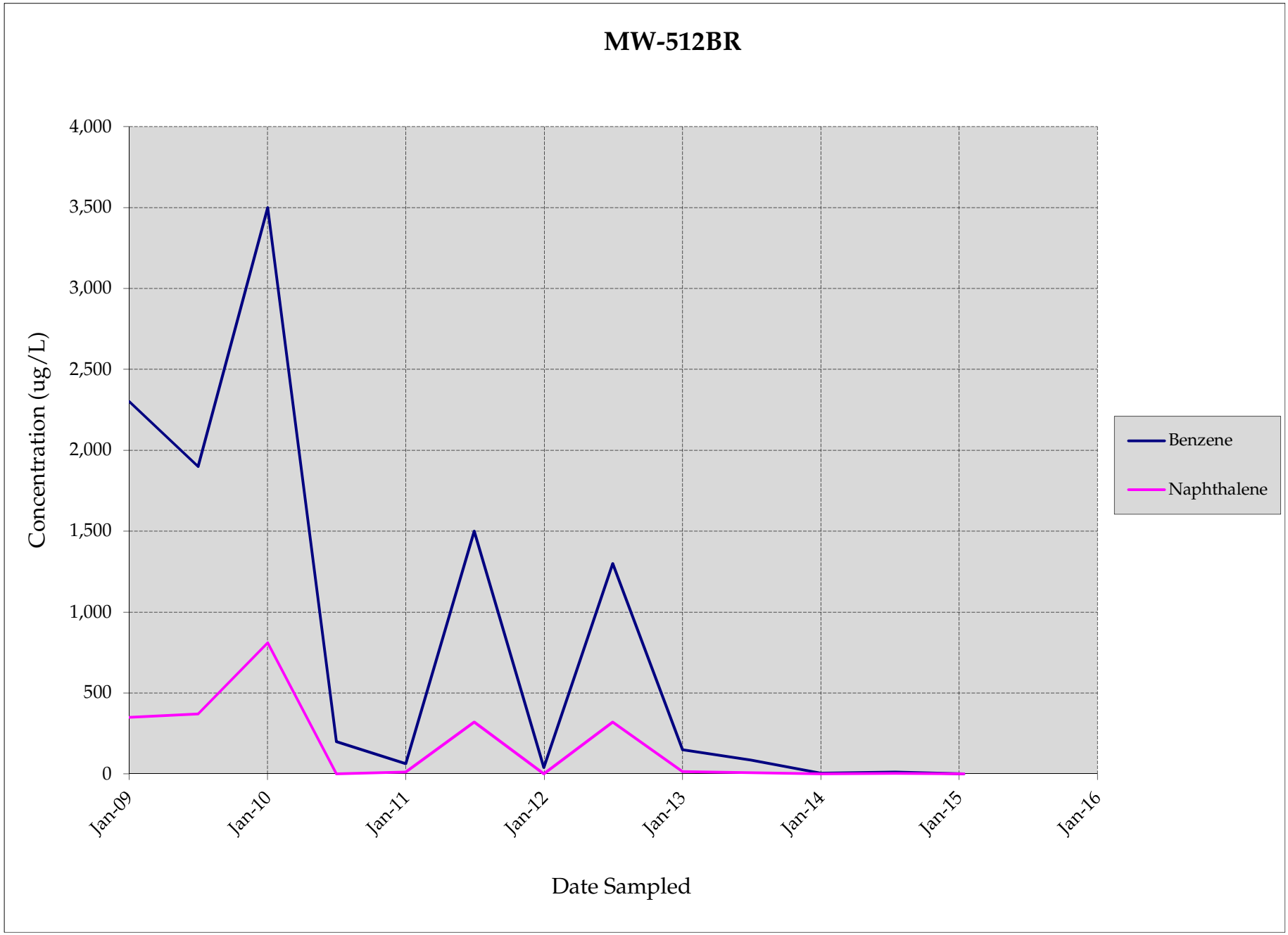

MW-503BR
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

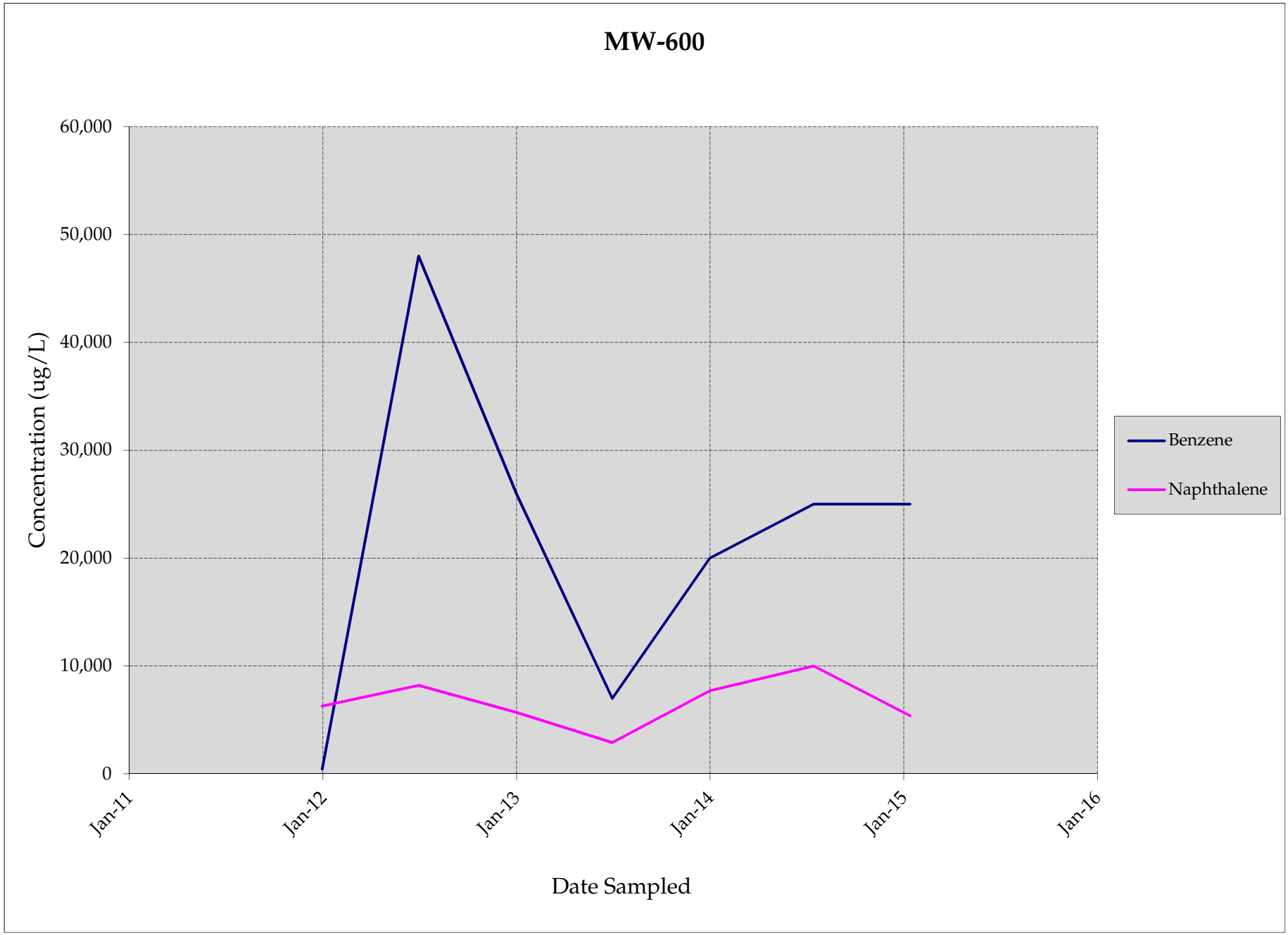

MW-504BR
3,000
2,500
2,000
1,500
1,000
500
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

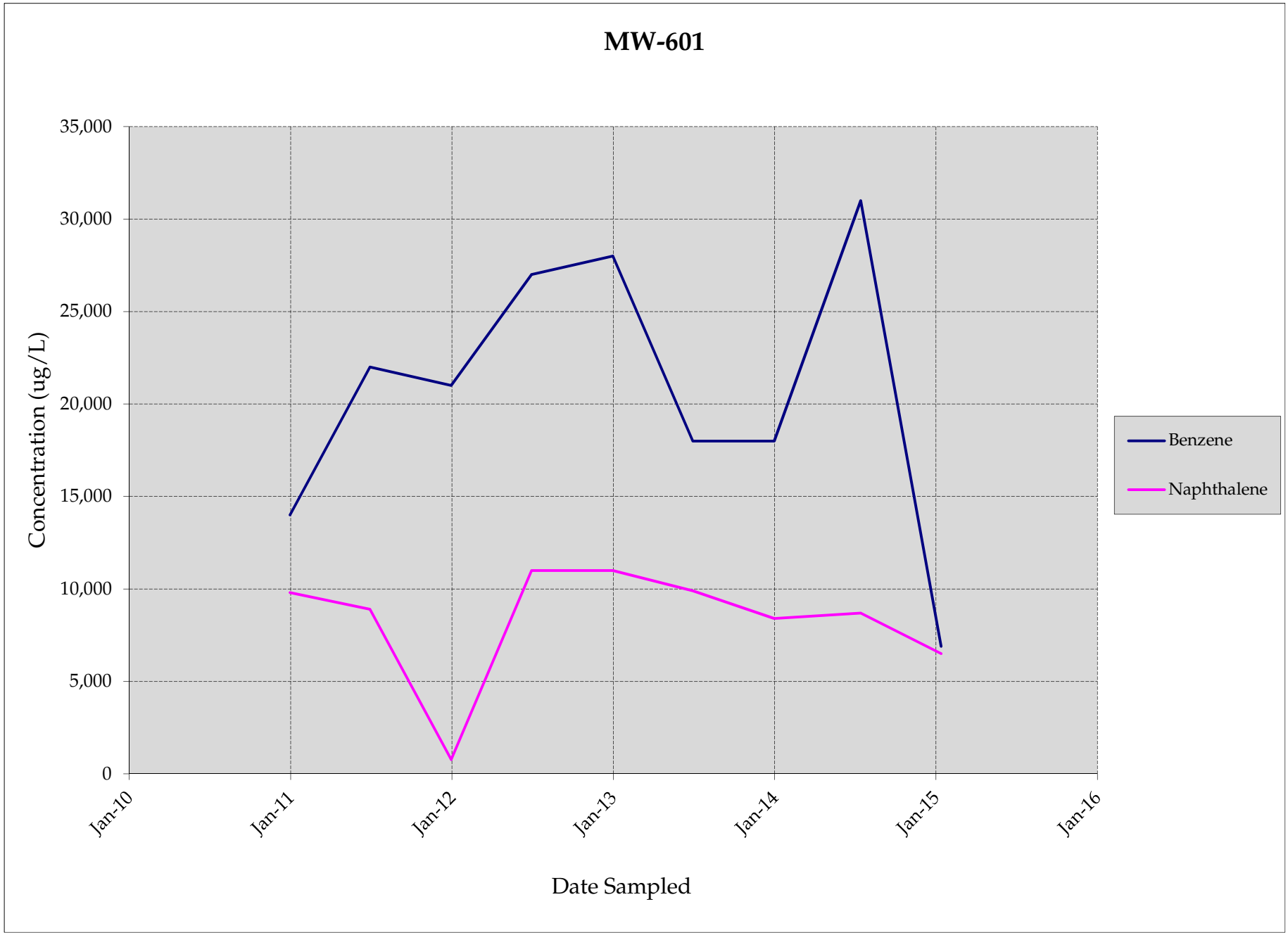

MW-509BR
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

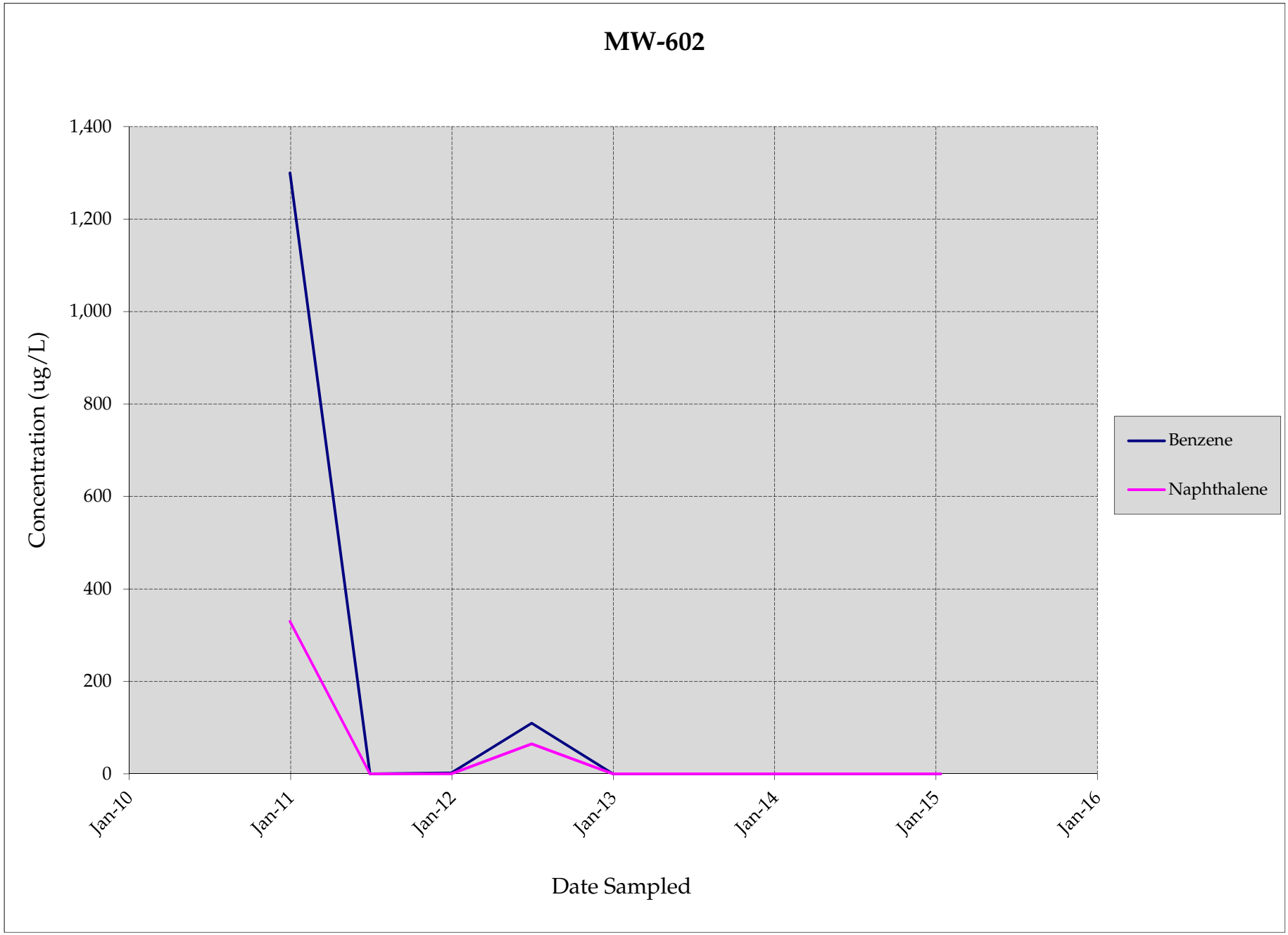

MW-510BR
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentratrion (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

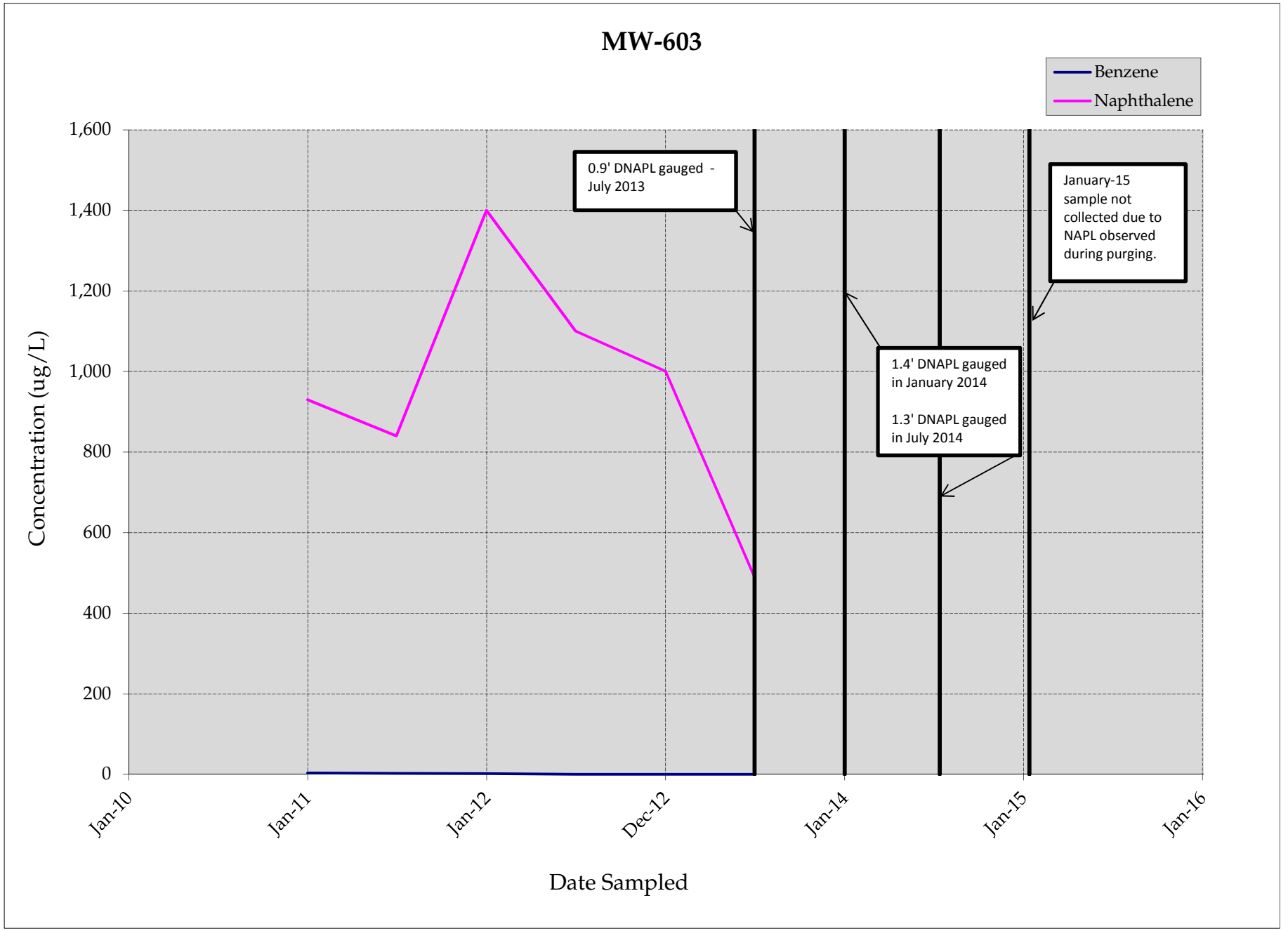

MW-511BR
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-512BR
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-600
60,000
50,000
40,000
30,000
20,000
10,000
0
Concentration (ug/L)
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-601
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentration (ug/L)
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-602
1,400
1,200
1,000
800
600
400
200
0
Concentration (ug/L)
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

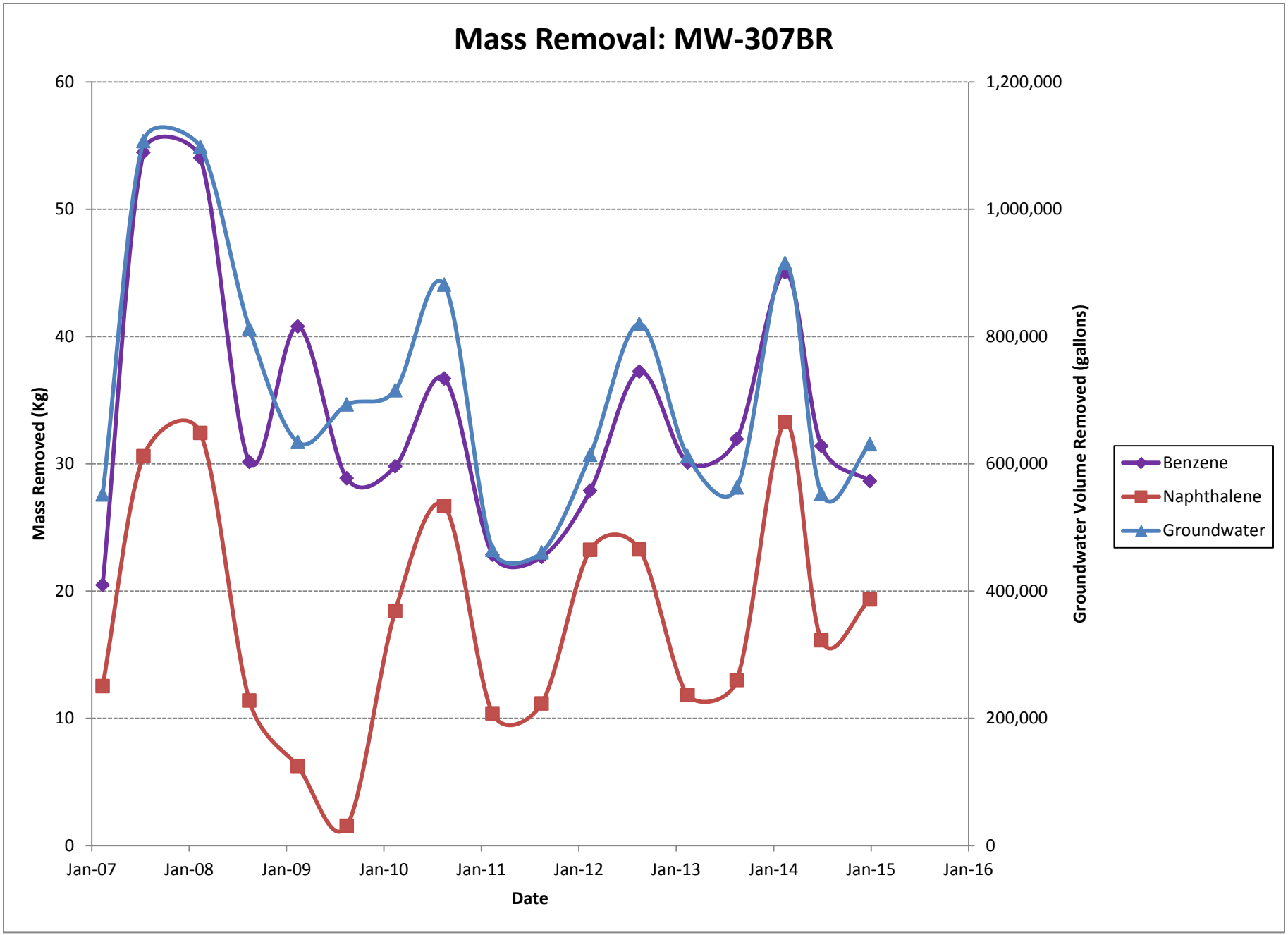

MW-603
Benzene
Naphthalene
1,600
1,400
1,200
1,000
800
600
400
200
0
Concentration (ug/L)
0.9' DNAPL gauged - July 2013
January-15 sample not collected due to NAPL observed during purging.
1.4' DNAPL gauged in January 2014
1.3' DNAPL gauged in July 2014
Jan-10
Jan-11
Jan-12
Dec-12
Jan-14
Jan-15
Jan-16
Date Sampled

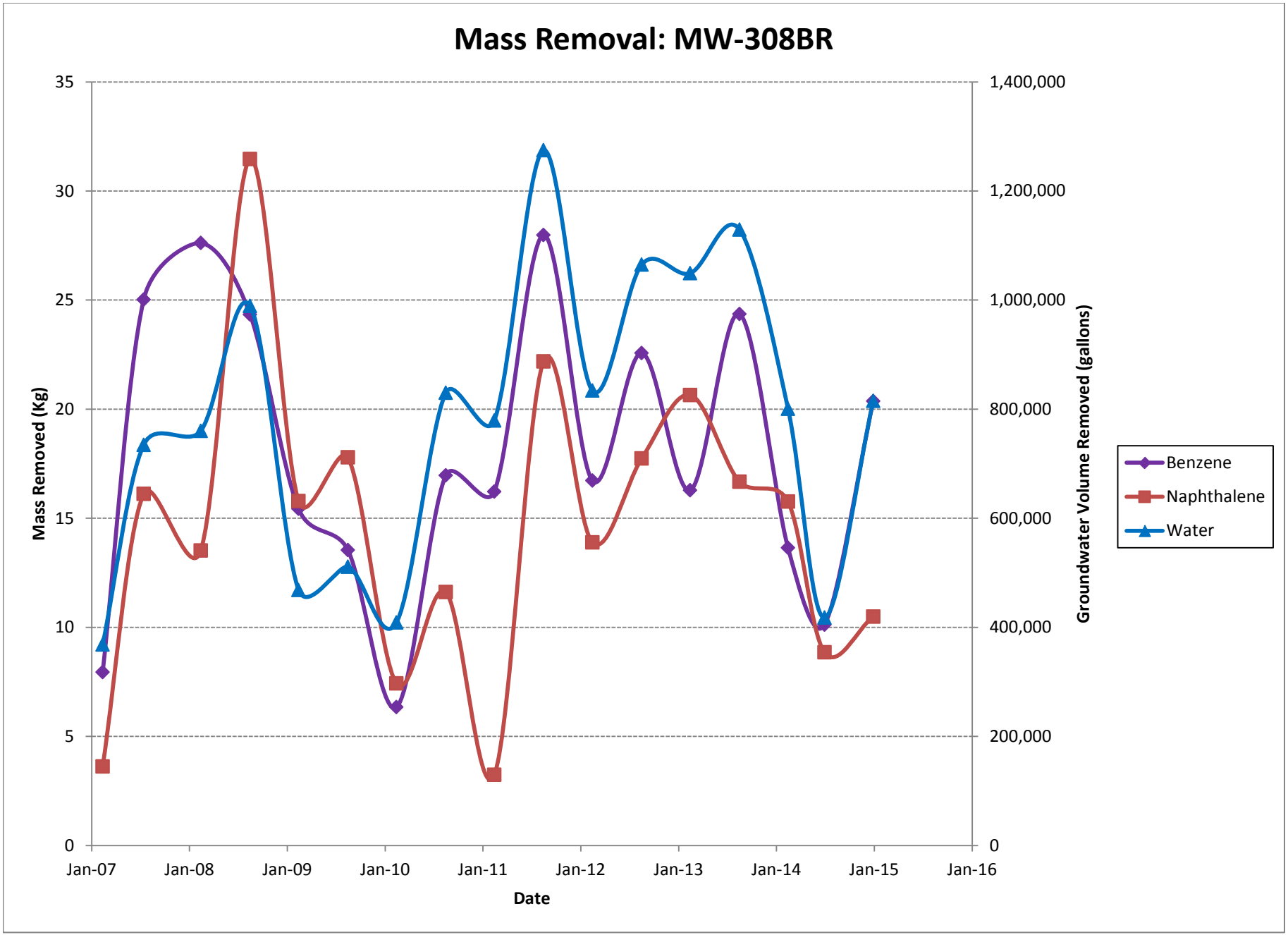
Mass Removal Trend Graphs

Appendix G

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700


Mass Removal: MW-307BR
Mass Removed (Kg)
Groundwater Volume Removed (gallons)
Date
Benzene
Naphthalene
Groundwater
60
50
40
30
20
10
0
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16


Mass Removal: MW-308BR
Mass Removed (kg)
Groundwater Volume Removed (gallons)
Date
Benzene
Naphthalene
Water
0
5
10
15
20
25
30
35
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16

Continuing Action Monitoring Plan Inspection

Appendix H

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Photograph: *1*	***North Parcel facing north-northwest***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *2*	***North Parcel + Reach E South of canal facing north-northwest***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *3*	***8th Street between Taylor St. and Walton Way facing north***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *4*	***Example of permanent signage on Northern Parcel and Carwash Property***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *5*	***ROW north of Taylor St. south of Block E facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *6*	***ROW south of Taylor St. north of South Parcel facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *7*	***Parcel 362 facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *8*	***Parcel 340 and 341 facing west***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *9*	***King Street south of Taylor Street facing south***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *10*	***Walton Way west of intersection with 8th Street facing west***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *11*	***Carwash Property facing west***	
Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *12*	***Parcel 764 facing northwest***	
Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *13*	***Permanent sign for underground electrical vault in intersection of 9th & Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *14*	***Underground electrical vault in intersection of 9th & Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *15*	***Fenwick Street facing east toward intersection with 8th Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *16*	***8th Street facing south away from intersection with Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *17*	***Intersection of 8th and Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *18*	***CSX Area facing southeast***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *19*	***Parcel 98 (Teresa's Warehouse) facing south***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *20*	***Parcel 53.1 (Joe Thompson Parking) facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

TABLE 1

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 5 Parcels (Northern Parcel)
Institutional and Engineering Controls

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 5 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Excavation w/in ISS Limits	X			
Land Disturbing Activities		X		needs reseeding along new sidewalk
New Utility Installations		X		unguarding conduit sticking up along new sidewalk potential tripping hazard.
Residential Use Requirements/Barrier	X			
Permanent Markers		X		One sign along western side laying down
Other				
TYPE 5 ENGINEERING CONTROLS				
Soil Cover (Condition, Disturbed, Maintained)		X		erosion in process along new sidewalk
Vegetative Cover (Condition)		X		need reseeding along new sidewalk
Functionally Equivalent Controls In-Place	X			
Other			X	silt fence along new sidewalk compromised

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 2

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 5 Property (Car Wash Area)
Institutional and Engineering Controls

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 5 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Excavation w/in ISS Limits	X			
Land Disturbing Activities		X		around new sidewalk needs seeding
New Utility Installations		X		lamp post conduit needs cordone
Residential Use Requirements/Barrier	X			
Permanent Markers	X			Signage visible and in good condition
Other				
TYPE 5 ENGINEERING CONTROLS				
Soil Cover (Condition, Disturbed, Maintained)		X		disturbed and needs more cover
Vegetative Cover (Condition)		X		erosion
Functionally Equivalent Controls In-Place	X			
Other			X	break in silt fence near MW-603

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 3

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 5 Property (Georgia Power Vault)
Institutional and Engineering Controls

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 5 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Excavation w/in ISS Limits	X			
Land Disturbing Activities		X		new sidewalk along canal
New Utility Installations		X		holes and conduit for new lamp posts
Residential Use Requirements/Barrier	X			
Permanent Markers	X			Signage visible and in good condition
Other				
TYPE 5 ENGINEERING CONTROLS				
Soil Cover (Condition, Disturbed, Maintained)		X		disturbed
Vegetative Cover (Condition)		X		needs seeding
Functionally Equivalent Controls In-Place	X			
Other			X	silt fence near MW-603 needs fixing

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Locations: Fenwick & 8th Streets)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-2

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Location: Walton Way)
Institutional and Engineering Controls
Street Right-of-Way Location

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-3

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Location: 8th Street)
Institutional and Engineering Controls
Street Right-of-Way Location

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion		X		ROW across from Taylor street needs seeding
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-4

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Taylor Street)
Institutional and Engineering Controls
Street Right-of-Way Locations (north and south of Tayor Street)

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-5

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Location: King Street)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-1

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 53.1)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion		X		needs gravel around sidewalk or vegetation
Other			X	open trench for lamp post conduit needs cordone

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-2

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 98)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion		X		around new sidewalk needs vegetation.
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-3

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 764)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-4

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 362)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-5

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 340 and 341)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

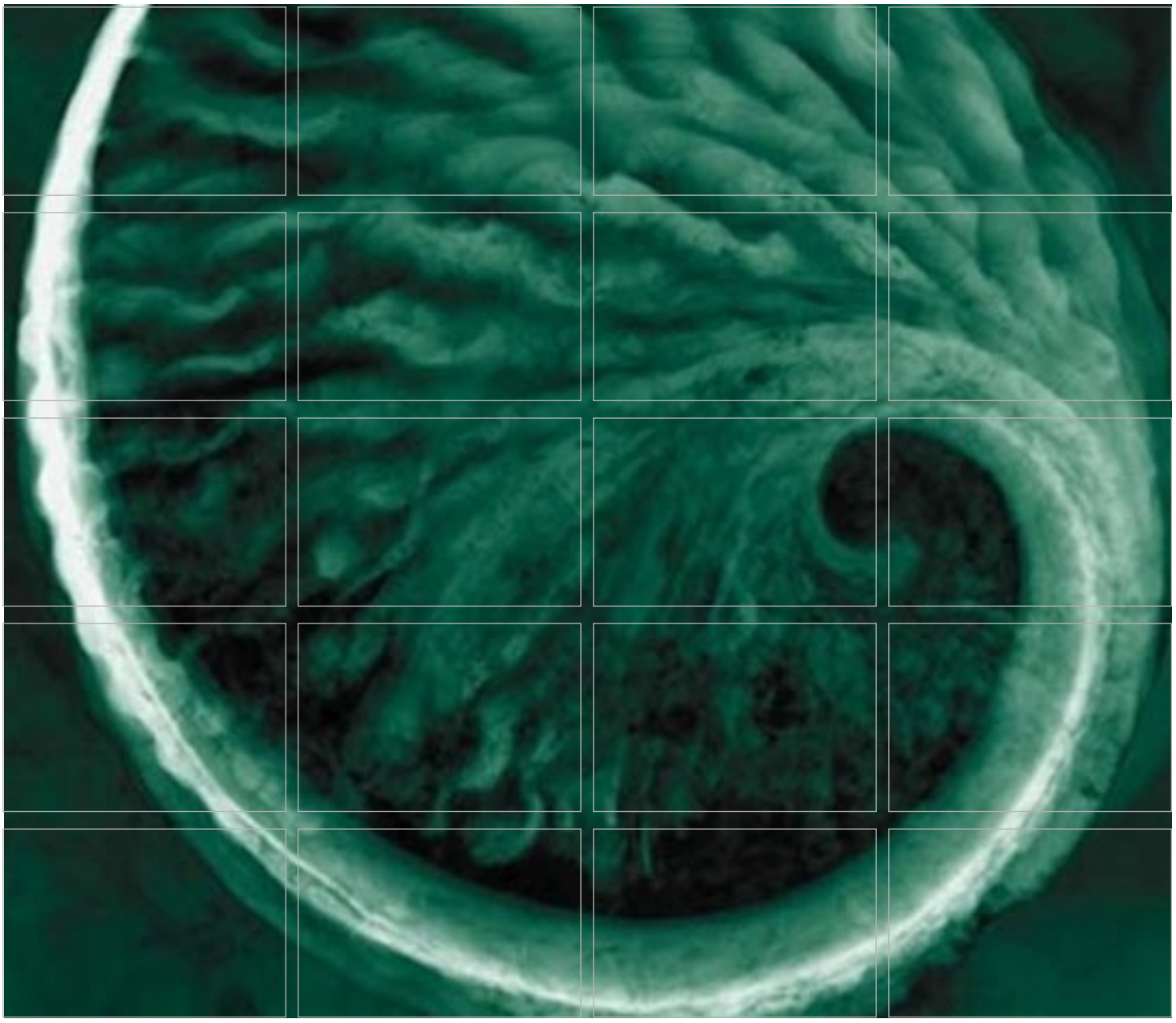
TABLE 5-6

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (CSX Area)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed



17th Semiannual Corrective Action Effectiveness Report: January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia HSI #10132

May 29, 2015

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The world's leading sustainability consultancy

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TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 BACKGROUND 2
2.1 GROUNDWATER MONITORING AND EVALUATION STUDIES 4
2.2 SCOPE OF WORK 5
2.2.1 Field Tasks 5
2.2.2 Reporting Tasks 5
2.3 GROUNDWATER MONITORING NETWORK 5
2.3.1 On-Site Wells Sampled 6
2.3.2 Off-Site Wells Sampled 7
2.4 GROUNDWATER SAMPLING AND ANALYSIS 7
2.5 QUALITY CONTROL/QUALITY ASSURANCE SAMPLES 8
2.6 MANAGEMENT OF INVESTIGATION WASTE 9
3.0 GROUNDWATER MONITORING RESULTS 10
3.1 GROUNDWATER FLOW AND ELEVATIONS 10
3.2 GROUNDWATER ANALYTICAL RESULTS 12
3.2.1 Alluvium 12
3.2.2 Galliard Formation 13
3.2.2.1 Volatile Organic Compound Results 13
3.2.2.2 Semivolatile Organic Compound Results 14
3.2.2.3 Inorganic Compound Results 14
3.2.3 Saprolite 14
3.2.4 Transition Zone 15
3.2.5 Bedrock 15
3.2.5.1 Volatile Organic Compound Results 15
3.2.5.2 Semivolatile Organic Compound Results 16
3.2.5.3 Inorganic Compound Results 16
3.3 NATURAL ATTENUATION PARAMETERS 16
3.3.1 Electron Acceptors 17
3.3.1.1 Dissolved Oxygen and Oxidation-Reduction Potential 17
3.3.1.2 Nitrate 17
3.3.1.3 Sulfate 18
3.3.1.4 Carbon Dioxide 18
3.3.2 Biodegradation Byproducts 19
3.3.2.1 Methane 19
3.3.2.2 Ferrous Iron 19
3.3.3 Summary of Natural Attenuation Evaluation 20
3.3.4 Quality Assurance, Quality Control, and Data Validation 20
4.0 DATA COMPARISON AND SUMMARY 22
4.1 ALLUVIUM WELLS 22
4.2 GALLIARD WELLS 22
4.3 SAPROLITE WELLS 23
4.4 TRANSITION ZONE WELLS 24
4.5 BEDROCK WELLS 24
5.0 PERFORMANCE AND OPERATIONS OF BEDROCK GROUNDWATER EXTRACTION SYSTEM 25
5.1 PERFORMANCE AND OPERATIONS 25
5.2 MASS REDUCTION CALCULATIONS 26
6.0 CONCLUSIONS 27
7.0 REFERENCES 29

LIST OF TABLES

2-1 Monitoring Well Network Summary
2-2 Monitoring Well Construction Summary
2-3 Site-Specific Constituents of Interest and Monitored Natural Attenuation Parameters
3-1 Depth to Water and Groundwater Elevations – January 12, 2015
3-2 Groundwater Analytical Results for Alluvium Wells
3-3 Groundwater Analytical Results for Galliard Formation Wells
3-4 Groundwater Analytical Results for Saprolite Wells
3-5 Groundwater Analytical Results for Transition Zone Wells
3-6 Groundwater Analytical Results for Bedrock Wells
3-7 Detections and RRS Exceedances in the Alluvium Wells
3-8 Detections and RRS Exceedances in the Galliard Formation Wells
3-9 Detections and RRS Exceedances in the Saprolite Wells
3-10 Detections and RRS Exceedances in the Transition Zone Wells
3-11 Detections and RRS Exceedances in the Bedrock Wells
5-1 Treatment System Effluent Sample Results
5-2 Extraction Wells Operational Data
5-3 Mass Reduction Calculations in Bedrock Groundwater

LIST OF FIGURES

1-1 Site Location Map
2-1 Groundwater Monitoring Well Network
3-1 Groundwater Elevation Map for the Alluvium – January 12, 2015
3-2 Groundwater Elevation Map for the Galliard – January 12, 2015
3-3 Groundwater Elevation Map for the Saprolite – January 12, 2015
3-4 Groundwater Potential Map for the Bedrock and Transition Wells – January 12, 2015
3-5 Type I RRS Exceedances for the Alluvium Wells – January 2015
3-6 Type I RRS Exceedances for the Galliard Formation Wells – January 2015
3-7 Type I RRS Exceedances for the Saprolite Wells – January 2015
3-8 Type I RRS Exceedances for the Bedrock and Transition Wells – January 2015
3-9 Benzene and Naphthalene Isoconcentration Map for the Galliard Formation – January 2015
3-10 Benzene and Naphthalene Isoconcentration Map for the Bedrock Formation and Transition Wells – January 2015
3-11 Natural Attenuation Parameters in Alluvium Groundwater – January 2015
3-12 Natural Attenuation Parameters in Galliard Formation Groundwater – January 2015
3-13 Natural Attenuation Parameters in Saprolite Groundwater – January 2015
3-14 Natural Attenuation Parameters in Bedrock and Transition Wells Groundwater – January 2015

LIST OF APPENDICES

A *Groundwater Sampling Log Sheets*
B *Laboratory Analytical Reports*
C *Seepage Velocity Calculations*
D *ERM Analytical Data Validation Checklist*
E-1 *Summary of Historical Groundwater Sampling Data – Alluvium, Galliard, and Saprolite Monitoring Wells*
E-2 *Summary of Historical Groundwater Sampling Data – Transition Zone and Bedrock Monitoring Wells*
E-3 *Summary of Historical Groundwater Sampling Data – Decommissioned Monitoring Wells*
F *Concentration Trend Graphs*
G *Mass Removal Trend Graphs*
H *Continuing Action Monitoring Plan Inspection*

PROFESSIONAL CERTIFICATION PAGE

17th SEMIANNUAL CORRECTIVE ACTION EFFECTIVENESS REPORT – JANUARY 2015 GROUNDWATER MONITORING EVENT
ATLANTA GAS LIGHT COMPANY
FORMER MANUFACTURED GAS PLANT SITE
AUGUSTA, GEORGIA
HSI NO. 10132

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

Adria Reimer, P.G. #002004

May 26, 2015

1.0 INTRODUCTION

Environmental Resources Management (ERM) has prepared this 17th Semiannual Corrective Action Effectiveness Report (CAER) on behalf of Atlanta Gas Light Company (AGLC). This report summarizes the results of the groundwater monitoring event performed in January 2015 at the former manufactured gas plant (MGP) Site in Augusta, Georgia (the Site).

The Site includes property owned by AGLC and formerly used for MGP operations, property owned by AGLC not used for MGP operations, surrounding and nearby parcels not owned by AGLC, a portion of the Third Level Canal, and city right-of-ways (ROW). The Site is divided between the "on-Site" areas for the AGLC property where former MGP operations were located (i.e., Northern Parcel, Southern Parcel, Western Parcel, and Southeastern Bituminous Parcel) and the "off-Site" areas for properties that were not part of the former MGP operations. The Site layout and location map (Figure 1-1) shows the setting of the AGLC property within the city of Augusta, Richmond County, Georgia.

The purpose of this report is to:

- Fulfill requirements of Consent Order EPD-VRP-011issued December 3, 2014;
- Fulfill requirements for groundwater monitoring outlined in the 2001 Corrective Action Plan (CAP) prepared for AGLC by ThermoRetec Consulting Corporation (ThermoRetec, 2001);
- Monitor changes in groundwater constituent-of-interest (COI) concentrations to determine post-remediation groundwater quality;
- Present monitored natural attenuation (MNA) results and evaluate MNA processes at the Site in the alluvium, Galliard Formation, saprolite, and bedrock groundwater units; and
- Confirm the continued stability of Galliard and bedrock groundwater plume extents.

2.0 BACKGROUND

Excavation and *in-situ* solidification (ISS) operations were completed for the Northern Parcel and Car Wash areas during fall 2003. In 2004, soil removal (excavation) activities were completed at Blocks A, E, G, and H; 8th Street and Fenwick Street; and along five segments of the Third Level Canal (designated Reach D, Reach E, Reach F, Reach G, and Reach H). The excavation and ISS remedial activities within the Northern Parcel were documented in the August 9, 2005, *Northern Parcel Corrective Action Closure Report* prepared by MACTEC and approved by the Georgia Department of Natural Resources, Environmental Protection Division (EPD) on February 24, 2006.

In-situ chemical oxidation (ISCO) of the church area (Block E), along the 8th Street ROW, within the Gas Station parcel, and along the Walton Way ROW was completed in November 2005. A *Corrective Action Closure Report* (CACR) for these off-Site areas (OU-1 and -2) was submitted by MACTEC on January 16, 2009, and was approved by EPD in a letter dated March 30, 2009. A separate CACR was also prepared for the Third Level Canal (OU-3) following completion of remediation activities adjacent to the CSX Railroad property. The CACR for OU-3 was submitted by MACTEC on January 16, 2009, and approved by EPD in a letter dated March 30, 2009. A bedrock groundwater extraction and treatment system has operated at the Site since November 2006. Groundwater is extracted from MW-307BR and MW-308BR, treated via activated carbon, and discharged to the publicly owned treatment works (POTW).

A supplemental bedrock investigation was performed by AECOM in July 2008 and included the installation of nine additional bedrock monitoring wells (MW-503BR, MW-504BR and MW-506BR through MW-512 BR). Results of this investigation are summarized in AECOM's *Bedrock Ground Water Investigation Report* dated February 19, 2009. All the installed bedrock monitoring wells were subsequently added to the monitoring network.

In correspondence dated March 6, 2009, AGLC responded to EPD's comments to the 4th CAER and provided a proposed approach and timeframe to develop a Site Conceptual Model (SCM) and conduct groundwater modeling (following approval by EPD of the SCM), and prepare a feasibility study (FS; following approval by EPD of the Ground Water Modeling Report) in order to address the Site as a whole and better define an effective path to closure. A draft SCM dated June 19, 2009, was submitted to EPD by Environmental Cost Management, Inc. (ECM) on behalf of AGLC. A revised SCM, addressing EPD comments dated August 3, 2009, was submitted by ECM on October 2, 2009. The revised SCM presented changes to the well network that were approved in EPD's August 3, 2009, letter. These changes to the monitoring well network were incorporated into the current sampling event. A revised SCM was submitted to EPD on December 28, 2009, and approved by EPD in a letter dated March 19, 2010.

A supplemental data gap investigation was performed by ECM in October 2010 in accordance with the recommendations of the December 2009 SCM. The investigation included the installation of one additional bedrock monitoring well (MW-513BR), and the installation of four additional Galliard Formation monitoring wells (MW-600, MW-601, MW-602, and MW-603). In addition, one alluvium well (MW-04) and five Galliard Formation wells (MW-18, MW-201, MW-210, MW-305, and MW-407D) were decommissioned based on the recommendations of the EPD-approved SCM. MW-408D was abandoned and replaced with MW-408DR. Results of this investigation are summarized in ECM's *Data-Gap Investigation and Monitoring Well Installation/Decommissioning Report* dated February 14, 2011. The installed monitoring wells have been included in the monitoring well network.

The results of the 2010 data gap investigation were incorporated in ECM's *Site Conceptual Model Addendum* (SCM Addendum) dated February 17, 2012. The SCM Addendum recommended an overall reduction to the monitoring well network, and the continued inclusion of bedrock monitoring wells MW-504BR and MW-510BR within the well network to monitor plume control. In a May 23, 2012 letter, the EPD approved a number of the reductions, including the abandonment of five wells (MW-11, MW-23, MW-211, MW-312, and MW-314), and the elimination of sampling and/or gauging in a number of Discrete Depth Sampling Port (DDSP) wells. Well abandonment work was completed in July 2012, with the exception of MW-211, which was not abandoned due to access issues and will be abandoned during future activities. Ongoing groundwater monitoring reflects the revised monitoring well network, which was documented in Table 3-8 of ECM's June 22, 2012 response to the EPD's May 23, 2012 letter.

The *Ground Water Flow and Transport Model* report was submitted to the EPD on June 5, 2012. The EPD provided comments on June 29, 2012. In general, the comments discussed the need for inclusion of a sensitivity analysis and a detailed calibration of the model results to historical monitoring data. A response with the additional analysis was provided to the EPD on August 14, 2012. In accordance with the Site-wide approach developed in 2009, an FS was prepared based on the results of the *SCM Addendum* and the groundwater modeling. The FS was submitted to the EPD on December 13, 2012, and recommended excavation in Block C (D'Antignac Street), with MNA in the street areas and Block E as access issues, utilities, and the presence of buildings limit effective implementation of a remedy. The FS also recommended discontinuing operation of the bedrock groundwater extraction system.

EPD provided comments to the FS in correspondence dated October 9, 2013, and required that actions be taken to address remaining source materials in all areas of the Site, including the street areas and Block E. Rather than submitting a revised FS, the EPD requested that the comments be addressed in a Revised Corrective Action Plan. In subsequent meetings and correspondence with EPD, it was agreed that AGLC would submit a Revised CAP by August 29, 2014.

After further evaluation and coordination, AGLC and EPD agreed that the Augusta MGP Site was a candidate for enrollment in the Georgia Voluntary Remediation Program (VRP). AGLC received a letter from EPD concurring with moving the Augusta MGP Site into the VRP contingent on execution of a new Consent Order moving the Augusta MGP Site into the VRP as well as submittal of an acceptable Voluntary Investigation and Remediation Plan (VIRP) in lieu of a Revised Corrective Action Plan (RCAP) by August 28, 2014., consistent with the original RCAP submittal deadline. The VIRP was hand-delivered to the EPD on August 28, 2014.

Proposed Consent Order EPD-VRP-011 was transmitted by EPD to AGLC on June 27, 2014 for review and signature. AGLC signed the proposed Consent Order and transmitted back to EPD on July 22, 2014. The public notice period for the proposed Consent Order EPD-VRP-011 closed on September 10, 2014. Additionally, to demonstrate AGLC's commitment to enrolling the Augusta MGP Site in the VRP, AGLC submitted an initial VIRP Application Form and Checklist with associated VRP application fee on August 6, 2014.

On behalf of AGLC, AMEC submitted the Voluntary Investigation and Remediation Plan (VIRP) to EPD on August 28, 2014. The VIRP provided the proposed remediation approach, schedule and supporting documentation, and included an updated VIRP Application form. The EPD approved the VIRP application in a December 3, 2014 letter, which also set forth the required schedule for semiannual progress reports on June 1st and December 1st of each year, and additional requirements for the December 1, 2017 progress report. A second letter from EPD, also dated December 3, 2014, provided additional technical comments on the VIRP, which are to be addressed in subsequent progress reports.

Groundwater sampling events conducted between 2001 and 2006 were summarized in previous semiannual groundwater monitoring reports. Groundwater sampling events conducted after completion of corrective actions described above from 2007 through the present have been summarized in CAERs.

2.1 GROUNDWATER MONITORING AND EVALUATION STUDIES

This semiannual corrective action effectiveness groundwater monitoring and evaluation event was conducted in accordance with the *Ground Water Monitoring and Evaluation Plan* presented as Section 5.0 of the 2001 *CAP* (ThermoRetec, 2001) and, in part, the *Update of the Revised Ground Water Monitoring Plan* (GMP; ENSR Correspondence, May 2007). The sampling event conducted in January 2015 was the 17th groundwater sampling event in the post-ISCO monitoring period as outlined in the revised *Basis of Design Work Plan* (LAW, 2002).

This section of the report describes procedures used for groundwater gauging, sampling, chemical analysis, quality assurance/quality control (QA/QC), and management of investigation-derived waste. Groundwater samples were collected using low-flow methods with peristaltic pumps.

2.2 SCOPE OF WORK

The 17th semiannual corrective action effectiveness groundwater sampling event included the following field and reporting tasks:

2.2.1 Field Tasks

- Gauge groundwater levels.
- Sample groundwater.
- Manage investigation-derived waste.

2.2.2 Reporting Tasks

- Prepare groundwater elevation maps for the alluvium, Galliard, and saprolite units.
- Prepare groundwater potentiometric surface contour lines within the bedrock and transition units.
- Prepare summary tables of laboratory analytical results for COI.
- Evaluate analytical results relative to Type 1 Risk Reduction Standards (RRS).
- Prepare maps showing Type 1 RRS exceedances for COI in alluvium, Galliard formation, saprolite, and transition zone/bedrock.
- Prepare benzene and naphthalene isoconcentration maps for the Galliard Formation and bedrock.
- Evaluate MNA indicator parameters.

2.3 GROUNDWATER MONITORING NETWORK

The list of wells selected for semiannual corrective action monitoring and evaluation was submitted to the EPD on July 8, 2001, along with the rationale for their inclusion. As noted earlier, the bedrock monitoring wells installed in July 2008 were included in the July 2014 sampling event.

As indicated in ERM's November 14, 2008 response to EPD, long-term inclusion of these wells in the monitoring network was evaluated based on the sampling results. In addition, the four Galliard monitoring wells and one bedrock monitoring well installed in October 2010 were included in this sampling event. The February 2012 *SCM Addendum* proposed further modifications to the monitoring well network. Most of these modifications were approved by the EPD in correspondence dated May 23, 2012. The revised monitoring well network was documented in Table 3-8 of ECM's June 22, 2012 response to the EPD. The current status of each active monitoring network well is listed in Table 2-1, and the locations of the existing monitoring wells are shown on Figure 2-1. The well list has been revised to reflect the comments in EPD's May 23, 2012 correspondence regarding the SCM Addendum.

Sixty (60) monitoring wells were included in the sampling network during the January 2015 sampling event. Two monitoring wells have been destroyed by activities associated with City of Augusta contractors (MW-5 and MW-506BR). MW-506BR was paved over during improvements to Dyess Park and is no longer accessible for sampling. MW-5 was destroyed during work conducted by the City of Augusta Canal Authority during construction of the Canal Trail. In addition, three monitoring wells were not sampled due to the presence of dense non-aqueous phase liquid (DNAPL) observed during gauging (MW-205, MW-502D, and MW-603). As a result, groundwater samples were collected from fifty-five (55) monitoring wells. A summary of well construction information is included as Table 2-2.

2.3.1 On-Site Wells Sampled

The following on-Site wells were sampled in January 2015:

MW-12	MW-19	MW-202DR	MW-203	MW-207
MW-213	MW-308BR	MW-310SAP	MW-310BR	MW-311
MW-402S	MW-402D	MW-508BR	MW-601	

- MW-5 has been destroyed by the City of Augusta Canal Authority during construction of the Canal Trail. As such, MW-5 was not sampled.
- MW-205 was not sampled due to DNAPL observed in the well.

2.3.2 *Off-Site Wells Sampled*

Off-Site monitoring wells sampled in January 2015 include the following:

- City of Augusta ROW: MW-21, MW-22, MW-206, MW-214, MW-313, MW-408DR, MW-408S, MW-500BR, MW-503BR, MW-504BR, MW-507BR, MW-509BR, MW-510BR, and MW-513BR
- Augusta Civic Center Authority: MW-318, MW-320, and MW-325
- AGLC owned and/or leased to Miracle Making Ministries: MW-401S, MW-401D, MW-401SAP, MW-404DR, MW-501S, MW-505D, and MW-602
- Miracle Making Ministries: MW-304
- Amoco: MW-306D, MW-306SAP, MW-306TZ, MW-306BR, MW-511BR, MW-512BR, and MW-600
- Joseph Norris: MW-303 and MW-309BR
- Georgia Power: MW-307D, MW-307SAP, MW-307BR, MW-321, and MW-324
- The Catholic Church of the Most Holy Trinity: MW-319
- United States Post Office: MW-315
- MW-502D and MW-603 were not sampled due to DNAPL observed in the well during purging.
- MW-506BR has been paved over (destroyed) by the City of Augusta sometime between July 2012 and January 2013. As such, MW-506BR has not been sampled since July 2012.

2.4 *GROUNDWATER SAMPLING AND ANALYSIS*

During the initial groundwater gauging task, the condition of each well was noted, including the concrete surface seal, outer casing, inner expandable well cap, and lock. ERM replaced or repaired any well caps or locks that were damaged or missing. In addition to MW-5 and MW-506BR, which have been destroyed, damage to the well vault lids and locking caps were noted for MW-408S and MW-408DR. AGL has contacted the Canal Authority regarding this damage and repairs are being scheduled. Prior to sampling, all wells were gauged with an oil-water interface meter for depth to water.

Due to the historical detections of non-aqueous phase liquid (NAPL) at MW-205, MW-502D, and MW-603 care was taken to prevent possible cross contamination. A dedicated interface probe was dropped to the bottom of these wells following the groundwater gauging event to assess whether NAPL was present. NAPL was detected at the bottom of well MW-603 and a non-continuous detection of NAPL thickness was measured within the well column of MW-205 and MW-

502D. Due to the detections of NAPL, MW-205, MW-502D, and MW-603 were not sampled.

Before groundwater samples were collected, each well was purged using low-flow/low-volume techniques conducted in accordance with ERM's standard operating procedures, which are based on technical guidelines from U.S. Environmental Protection Agency Region 4 Science and Ecosystem Support Division Operating Procedures (USEPA, 2013). Monitoring wells experiencing excessive drawdown (>0.3 feet) were purged by removing a minimum of three well volumes or until the well ran dry, with the exception of bedrock wells where the removal of so large a volume was infeasible. In addition, the DDSP wells were purged by removing a minimum of three volumes, or until dry, because the small diameter of the well prevents simultaneous monitoring of the depth to water. The purpose of purging the well is to draw fresh formation water into the well so that the samples are representative of the portion of the aquifer surrounding the well. If a well was completely evacuated during purging, it was allowed to recharge and the groundwater sample was collected immediately after the well had fully recharged.

Field documentation of groundwater quality measurements included pH, conductivity, temperature, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity. Field parameter values and corresponding purge volumes were recorded on groundwater sampling forms. Copies of these forms for the January 2015 sampling event are included in Appendix A.

Groundwater samples were analyzed for the COI list (Table 2-3) as referenced in the CAP and the revised GMP. Analytical Environmental Services (AES) laboratory performed the analytical services. Laboratory analytical reports are provided in Appendix B.

The post-remedy semiannual monitoring reports include an evaluation to determine if MNA is a viable remedy for alluvial, Galliard Formation, saprolite, or bedrock groundwater. MNA parameters analyzed during the January 2015 sampling event are also listed in Table 2-3. MNA analyses were performed by AES.

2.5 *QUALITY CONTROL/QUALITY ASSURANCE SAMPLES*

Field QC samples were collected and analyzed to document the accuracy and precision of the laboratory. QC samples included:

- Trip Blanks. One trip blank accompanied each cooler containing volatile organic compound (VOC) samples sent to the laboratory. Trip blanks were analyzed to determine if any contaminants were introduced while

samples were stored or while in transit to the laboratory. Trip blanks were analyzed for VOCs only.

- Field Duplicates. Six field duplicates were collected, one from each of the following wells: MW-12, MW-306TZ, MW-307BR, MW-308BR, MW-315, and MW-401SAP. All duplicate samples were analyzed for COI and DUP-02, DUP-03, and DUP-06 (surrogate samples MW-315, MW-12, and MW-401SAP, respectively) were also analyzed for selected MNA parameters. Duplicates were collected to determine the precision of groundwater sample analysis and the variability of collection procedures.
- Matrix Spikes and Matrix Spike Duplicates. A total of three Matrix Spike and Matrix Spike Duplicate (MS/MSD) sample sets were collected from MW-207, MW-401SAP, and MW-309 as part of the laboratory analytical batch QC.

2.6 MANAGEMENT OF INVESTIGATION WASTE

All purge water from sampling activities was treated by the on-Site treatment system prior to ultimate discharge to the publicly owned treatment works (POTW). Personal protective equipment and other trash was placed in bags and deposited in solid waste containers.

3.0 GROUNDWATER MONITORING RESULTS

This section summarizes results of the January 2015 corrective action monitoring and evaluation event, including groundwater flow and elevations, analytical results, QA/QC, and data validation.

3.1 GROUNDWATER FLOW AND ELEVATIONS

During the January 2015 sampling event, all groundwater wells were inspected and the groundwater levels were gauged and recorded, as applicable. Groundwater elevation data derived from water level measurements collected in January 2015 is presented in Table 3-1. With the exception of porosity for the bedrock hydrogeologic unit, seepage velocity calculations in each unit are based on hydraulic conductivity estimates provided in the 2009 *Site Conceptual Model*, the average of porosity estimates given in the 2003 *Remedial Investigation* report, and January 2015 horizontal hydraulic gradients calculated by solving three-point problems for wells screened in each unit. Parameters (and sources, where applicable) used to calculate seepage velocity in each hydrogeologic unit and the resultant seepage velocity is summarized in Appendix C. The groundwater pump and treat system was shut off for a carbon changeout December 29, 2014 and remained off for fourteen (14) days prior to the gauging event on January 12, 2015. Therefore, the January 2015 groundwater flow and directions are indicative of ambient conditions.

The ISS masses have created an obstacle to groundwater flow on the Northern Parcel and on the former Car Wash property, since the hydraulic conductivity of each mass is several orders of magnitude lower than that of the surrounding alluvium in those portions of the shallow aquifer. The lower hydraulic conductivity of each mass (ranging from 10^{-9} to 10^{-7} centimeters per second) causes increased groundwater flow in the more permeable alluvium. Because groundwater cannot effectively flow through the ISS mass, no groundwater elevation contours are associated with this area.

Prior to soil remediation and ISS, groundwater flow in both the alluvium and Galliard Formation was generally in an easterly direction, with exception of seasonal conditions in the unconfined alluvium aquifer, which sometimes reversed the direction of flow into the Third Level Canal. Alluvium groundwater in January 2015 flowed toward the Northern Parcel from the north (MW-306S and MW-501S), west (MW-402S), and the south (MW-17 and MW-401S) (Figure 3-1). Seepage velocity in alluvial groundwater is estimated to be $1.2*10^{-1}$ ft/day.

The general post-ISS local flow pattern in the Galliard Formation has been an easterly flow, with a steeper groundwater gradient along the western boundary of the canal west of the Northern Parcel with a zone of nearly flat gradient encompassing the Site. This pattern is observed during the January 2015 monitoring event with overall groundwater flowing easterly, toward the Savannah River (Figure 3-2). The groundwater flow conditions observed beginning in January 2011 differed from the pattern during previous monitoring events conducted from January 2008 through July 2010, where localized mounding occurred around the Site and groundwater flowed radially outward. Groundwater flow in the Galliard unit is influenced by the extremely low hydraulic conductivity of the ISS mass in the Northern Parcel and Car Wash area, which causes groundwater downgradient (east) of the ISS mass in the Northern Parcel to form a near-stagnant zone of very low gradient. Groundwater flow is complex in the immediate vicinity of the ISS masses, leading to some variability in localized groundwater flow patterns from event to event. Seepage velocity in Galliard groundwater outside the ISS mass is estimated to range from $2.4*10^{-3}$ to $9.9*10^{-3}$ ft/day.

The January 2015 groundwater elevation data for the saprolite unit indicates groundwater flow trends east towards MW-214 (Figure 3-3). The differences in the groundwater elevations between MW-307SAP (located adjacent to MW-307BR) and MW-306SAP (located approximately 250 feet upgradient of MW-307BR) were previously compared for operating and non-operating periods. In July 2008 (system shutdown), the elevation difference was 0.36 feet, while in January and July 2009 (system running) the elevation differences were 2.39 and 2.45 feet, respectively. Comparisons of elevation data for MW-214 (located near MW-308BR) and MW-309SAP (located over 400 feet downgradient) during the same time periods indicate similar relationships. This suggests that the bedrock extraction system influences groundwater flow within the saprolite. Any groundwater flow in saprolite (or bedrock) interpreted near or adjacent to the ISS mass is assumed to flow under the mass. Groundwater flow is possible in the saprolite unit since ISS was keyed only into the top of saprolite and not completed through the entire vertical extent of the unit. The elevation of groundwater in saprolite is lower than the elevation of the bottom of the ISS mass and therefore, interpreted groundwater flow is beneath the ISS mass. Seepage velocity in saprolite groundwater is estimated to be $8.6*10^{-5}$ ft/day.

The bedrock aquifer is a crystalline-rock aquifer that exhibits very high interconnectivity of the fracture sets and foliation planes to such a degree that groundwater flow simulates an anisotropic porous medium. Groundwater flow, as well as dissolved constituent transport, is dominated by the northeast-southwest orientation of the primary fracture system (see the *Bedrock Ground Water Investigation Report* [AECOM, 2009] for a more detailed discussion of the bedrock features).

Potentiometric surface contour lines are presented in Figure 3-4 to infer potential groundwater flow directions in bedrock in January 2015 following over seven years of extraction system operation.

Because of the influence of bedrock fracture orientation, localized groundwater flow is not necessarily perpendicular to the potentiometric surface at all locations. Since fractured bedrock aquifers are inherently anisotropic and heterogeneous, calculation of seepage velocity may not be representative using bulk porosity estimates. However, a range of porosity estimates may provide bounds on the expected seepage velocity of the bedrock aquifer. As presented in Appendix C, multiple estimates of seepage velocity were calculated by solving three-point problems for different areas of the Site and using a range of porosity estimates from the literature. The calculated range of seepage velocity in bedrock aquifer at the Site is between $6.5*10^{-3}$ and $6.1*10^{-1}$ ft/day.

Based on January 2015 data collected under ambient (non-pumping) conditions, groundwater flow in bedrock appears to be toward the southeast (Figure 3-4). The groundwater recovery well at MW-307BR, which has subsequently returned to operation following the January 2015 sampling event, has historically captured groundwater in the bedrock from up to 900 feet to the northeast as was evidenced by the groundwater gradient towards the pumping wells at MW-325 in previous reports.

3.2 GROUNDWATER ANALYTICAL RESULTS

Analytical results for groundwater samples collected in January 2015 from wells monitoring the various aquifers are summarized in Tables 3-2 through 3-6. These results were compared to Type 1 Risk Reduction Standards (RRS). Detected concentrations exceeding the Type 1 RRS are presented in Figures 3-5 through 3-8. Field sampling forms are included in Appendix A, copies of the laboratory analytical reports are provided in Appendix B, and data validation reports are attached in Appendix D. A complete summary of all analytical data collected for the groundwater monitoring program (since 2001) is provided in Appendix E. A summary of the January 2015 benzene and naphthalene monitoring results and comparison to historical data is presented in Section 4.

3.2.1 Alluvium

Analytical results for samples collected from alluvium monitoring wells were compared to their respective Type 1 RRS in Table 3-2. The number of alluvium monitoring wells sampled, number of detections for each COI, range of concentrations, and wells with Type 1 RRS exceedances is summarized in Table 3-7. The locations where exceedances occurred and the concentrations of COI detected above the Type 1 RRS during the January 2015 groundwater monitoring event are shown in Figure 3-5. Benzene (MW-501S) was the only VOC or SVOC detected above Type 1 RRS and arsenic (MW-408S) and cadmium (MW-501S) were the only exceedances are reported for groundwater samples collected at alluvium monitoring wells.

Benzene and cadmium were reported at MW-501S at concentrations of 35 µg/L and 0.0153 mg/L, respectively above the Type 1 RRS of 5 µg/L and 0.005 mg/L, respectively. Benzene has not historically been detected in MW-501S, which is located on the west side of the canal.

Prior to this event, all benzene results have been non-detect since February 2007, with the exception of an estimated concentration (0.37J µg/L) in July 2010. Arsenic was reported at 0.222 mg/L above the Type 1 RRS of 0.05 mg/L in the groundwater sample collected at MW-408S.

3.2.2 Galliard Formation

Analytical results of samples collected from the Galliard Formation wells were compared to their respective Type 1 RRS, as summarized in Table 3-3. The number of Galliard monitoring wells sampled, number of detections for each COI, range of concentrations, and wells with Type 1 RRS exceedances is summarized in Table 3-8. The locations where exceedances occurred and the concentrations of COI detected above the Type 1 RRS during the January 2015 groundwater monitoring event are shown in Figure 3-6. The distributions of benzene and naphthalene concentrations in groundwater samples collected from the Galliard Formation are depicted in Figure 3-9.

The greatest number of COI and the highest detected concentrations are found in groundwater sampled from wells MW-12, MW-600, and MW-601 located in the northeast corner of the Southern Parcel, in the city ROW south of Block A, and in the western-central portion of Block E, respectively (Figures 3-6 and 3-9). Monitoring wells MW-205, MW-502D and MW-603 contained DNAPL and were not sampled.

3.2.2.1 Volatile Organic Compound Results

During the January 2015 sampling event, benzene concentrations exceeding the applicable Type 1 RRS in groundwater were reported at four (4) well locations (MW-12, MW-304, MW-600 and MW-601). Ethylbenzene concentrations exceeding the applicable Type 1 RRS were reported in two (2) groundwater samples (MW-12 and MW-601). Toluene concentrations exceeding the applicable Type 1 RRS were reported in two (2) groundwater samples (MW-600 and MW-601; Table 3-3 and Table 3-8). The distribution of detected VOCs, specifically MGP-related compounds, in groundwater samples collect from the Galliard formation is similar to that reported in previous events.

Trichloroethylene (TCE) concentrations exceeding the applicable Type 1 RRS in groundwater were reported at well locations MW-21 and MW-401D. TCE is not an MGP-related constituent. No other VOCs were detected at MW-21 and MW-401D.

Specific VOCs were analyzed at a dilution due to the concentration of target compounds exceeding the calibration range of the instrument. The dilution factor and subsequent laboratory reporting limit exceeded the Type 1 RRS for specific VOCs analyzed in groundwater samples collected at monitoring wells MW-600 and MW-601 (Table 3-3). Samples that were analyzed at a dilution exceeding the Type 1 RRS have been highlighted in Table 3-3. The laboratory reports indicate the dilution factor for each laboratory sample (Appendix B).

3.2.2.2 Semivolatile Organic Compound Results

The number of SVOC detections and exceedances of Type 1 RRS and the respective wells in which the exceedances occurred are presented in Table 3-8. The spatial distribution of SVOC Type 1 RRS exceedances within the Galliard Formation are represented in Figure 3-6. During the January 2015 sampling event, naphthalene concentrations exceeding the applicable Type 1 RRS in groundwater were reported at four (4) well locations (MW-12, MW-304, MW-600 and MW-601). An isoconcentration map showing naphthalene distribution is presented as Figure 3-9. The distribution of SVOCs remains consistent with those reported in previous events.

3.2.2.3 Inorganic Compound Results

The data presented in Table 3-3, Table 3-8, and on Figure 3-6 indicate that the only inorganic compounds to exceed Type 1 RRS during the January groundwater monitoring event were as follows:

- Selenium at MW-207 was detected at 0.0687 mg/L, above the Type 1 RRS of 0.05 mg/L;
- Cadmium at MW-401D was detected at 0.0358 mg/L, above the Type 1 RRS of 0.005 mg/L; and
- Arsenic at MW-408DR was detected at 0.429 mg/L, above the Type 1 RRS of 0.05 mg/L.

The laboratory reporting limit for antimony (0.02 mg/L), beryllium (0.01 mg/L) and thallium (0.02 mg/L) exceeded the respective Type 1 RRS values (Table 3-3).

3.2.3 Saprolite

Analytical results for groundwater samples collected from the saprolite wells were compared to their respective Type 1 RRS in Table 3-4. The number of monitoring wells with detections and Type 1 RRS exceedances for the saprolite unit are presented in Table 3-9 and Figure 3-7.

Concentrations detected at MW-311 exceeded the Type 1 RRS for benzene (5 µg/L) at 370 µg/L and naphthalene (20 µg/L) at 560 µg/L, and at MW-401SAP exceeded the Type 1 RRS for TCE (5 µg/L) at 20 µg/L. TCE is not an MGP-

related constituent. No other VOCs or SVOCs exceeded Type 1 RRS for saprolite wells in the January sampling event.

Nickel concentrations were reported above Type 1 RRS (0.1 mg/L) at MW-306SAP (0.151 mg/L) and MW-310SAP (0.336 mg/L). No other inorganic compounds were detected at concentrations exceeding Type 1 RRS. Laboratory reporting limits for antimony (0.02 mg/L), beryllium (0.01 mg/L) and thallium (0.02 mg/L) exceeded the respective Type 1 RRS values.

3.2.4 Transition Zone

Analytical results for samples collected from transition zone well MW-306TZ are compared to their respective Type 1 RRS in Table 3-5. Type 1 RRS exceedances for the transition zone well are presented in Table 3-10. As shown on Figure 3-8, naphthalene was detected at a concentration exceeding the Type 1 RRS (20 µg/L) in MW-306TZ at 300 µg/L. There were no Type 1 RRS exceedances for VOCs or inorganic compounds in MW-306TZ during the January 2015 sampling event.

3.2.5 Bedrock

Bedrock sampling results reported from the January 2015 groundwater monitoring event were compared to their respective Type 1 RRS in Table 3-6. The number of bedrock monitoring wells sampled, number of detections for each COI, range of concentrations, and wells with Type 1 RRS exceedances are summarized in Table 3-11. The detected constituent concentrations exceeding Type 1 RRS and the locations of the monitoring wells are depicted in Figure 3-8.

3.2.5.1 Volatile Organic Compound Results

As shown on Figure 3-8, benzene, ethylbenzene, and toluene were the only VOCs detected at concentrations exceeding the Type 1 RRS in bedrock monitoring wells during the January 2015 sampling event.

- Benzene concentrations exceeded the Type 1 RRS (5 µg/L) in nine (9) bedrock monitoring wells ranging from a low of 35 µg/L at MW-503BR to a high of 13,000 µg/L at MW-500BR;
- Ethylbenzene was detected at concentrations exceeding the Type 1 RRS in four (4) bedrock monitoring wells: MW-213 (1,500 µg/L), MW-307BR (2,100 µg/L), MW-308BR (810 µg/L), and MW-500BR (1,200 µg/L); and
- Toluene was detected at concentrations exceeding the Type 1 RRS (1,000 µg/L) at MW-308BR (2,100 µg/L).

Specific VOCs were analyzed at a dilution due to the concentration of target compounds exceeding the calibration range of the instrument. The dilution factor and subsequent laboratory reporting limits exceeded the Type 1 RRS for specific VOCs analyzed in groundwater samples collected at monitoring wells

MW-307R, MW-308R, and MW-500BR. Samples that were analyzed at a dilution exceeding the Type 1 RRS have been highlighted in Table 3-6. The laboratory reports indicate the dilution factor for each sample ID (Appendix B).

3.2.5.2 *Semivolatile Organic Compound Results*

One or more SVOCs were detected at concentrations exceeding their Type 1 RRS in groundwater samples collected at eight (8) bedrock well locations during the January 2015 sampling event (Figure 3-8, Table 3-6, and Table 3-11). Naphthalene was the primary SVOC detected above Type 1 RRS (20 µg/L) at concentrations ranging from 150 µg/L (MW-511BR) to 14,000 µg/L (MW-213). Concentrations and specific COIs detected in bedrock groundwater samples above Type 1 RRS are similar to those reported in previous events.

3.2.5.3 *Inorganic Compound Results*

The only Type 1 RRS exceedances for metals in bedrock groundwater was for cadmium (Type 1 RRS value of 0.005 mg/L) in monitoring well MW-325 (0.0090 mg/L). Laboratory reporting limits for antimony (0.02 mg/L), beryllium (0.01 mg/L), and thallium (0.02 mg/L) exceeded the respective Type 1 RRS values.

3.3 NATURAL ATTENUATION PARAMETERS

During the January 2015 groundwater monitoring event samples were collected from the subset of alluvium, Galliard Formation, saprolite, transition zone and bedrock monitoring wells identified in the GMP and analyzed for MNA parameters. This is the 12th monitoring event for MNA parameters at the former Augusta MGP Site, where MNA evaluation is being performed to determine if it is a viable remedy for the alluvial (alluvium and Galliard Formation), saprolite, and bedrock groundwater units. A comparison between individual MNA parameters and COI concentrations in groundwater is presented in this section. AGLC plans on discontinuing sample collection of MNA parameters until the corrective actions performed under the VRP have been completed.

The following analytes were eliminated from the monitoring program following the July 2006 event, since they were either not detected or their concentrations did not exhibit distributions that were pertinent to the continued evaluation of natural attenuation processes:

Total Iron
Manganese (total and dissolved)
Ammonia nitrogen (as N)
Sulfide

MNA parameters for selected alluvium, Galliard Formation, saprolite, and bedrock monitoring wells are shown on Figures 3-11 through 3-14.

3.3.1 Electron Acceptors

When DO is present in groundwater at sites impacted by non-chlorinated organic contaminants, microorganisms will preferentially use the oxygen as a terminal electron acceptor as they oxidize organic compounds to carbon dioxide and water.
However, when oxygen is not present or has been consumed (below 2.0 mg/L), microorganisms may use available alternative electron acceptors (ferric iron, manganese (IV), nitrate, sulfate, and carbon dioxide) to metabolize organic compounds.

In the course of this process, electron acceptors are converted to their respective reduced forms (ferrous iron, manganese (II), nitrite, sulfide, and methane), which are then released as byproducts of the metabolic processes. Thus, measuring and comparing concentrations and distributions of electron acceptors and reduced metabolic byproducts to concentrations and distributions of organic constituents can reveal a pattern indicative of biodegradation activity.

A description of electron acceptors detected in groundwater from the Site is provided in the following sections.

3.3.1.1 Dissolved Oxygen and Oxidation-Reduction Potential

Field measurements indicated concentrations of DO in the Galliard groundwater unit ranged from 0.18 mg/L in MW-600 to 7.73 mg/L in MW-206, while DO concentrations in bedrock ranged from 0.33 mg/L in MW-213 to 2.24 mg/L in MW-507BR. Low dissolved oxygen in groundwater reflects oxygen potentially used during biodegradation of organic compounds. The observed DO distribution is consistent with both the distribution of organic impacts and methane data. Wells with elevated concentrations of organic COI and/or methane generally exhibited lower DO values. All DO laboratory analyses performed by AES utilizing Method SM4500-O-G were received and analyzed beyond the specified hold time of "immediate or fifteen (15) minutes."

Most impacted Galliard wells (MW-12, MW-22, MW-202DR, MW-304, MW-401D, MW-404DR, MW-505D, MW-600, MW-601 and MW-602) had a negative ORP while most unimpacted wells had a positive ORP. All impacted bedrock wells had a negative ORP. The data suggest that biodegradation of MGP-related organic constituents is consuming available oxygen and results in an anaerobic geochemical environment near impacted wells.

3.3.1.2 Nitrate

Nitrate concentrations ranged from not detected (mostly in impacted wells) to 9.8 mg/L (in MW-310SAP, an unimpacted well).

Nitrate was detected in groundwater samples collected from wells MW-401D and MW-401SAP, where only TCE concentrations exceeded the Type 1 RRS.

The overall lower nitrate concentrations observed in wells impacted by organic compounds, other than TCE, indicates the potential for biodegradation of benzene, toluene, ethylbenzene, and xylenes (BTEX) and SVOCs (i.e., non-chlorinated hydrocarbons) may be occurring at the Site through a nitrate reduction pathway.

3.3.1.3 Sulfate

Sulfate concentrations in alluvium and Galliard Formation ranged from non-detect in several monitoring wells to 140 mg/L in MW-401D. Concentrations of sulfate in Galliard monitoring wells were reported at lower concentrations in monitoring wells with detections of SVOCs and BTEX. The overall lower sulfate concentrations observed in wells impacted by BTEX and SVOCs may indicate the potential for biodegradation to occur through a sulfate reduction pathway within the overburden.

In the saprolite unit, the sulfate was not detected in MW-311, which is the only monitoring well with detectable concentrations of benzene. The range of sulfate concentrations in the saprolite monitoring wells may indicate the potential for biodegradation to occur through a sulfate reduction pathway.

Sulfate concentrations in bedrock wells impacted by BTEX and/or SVOCs above Type 1 RRS ranged from not detected in MW-318 to 6.7 mg/L in MW-503BR and from not detected in MW-309BR to 38 mg/L in MW-507BR. Concentrations of sulfate in bedrock wells do not appear to indicate evidence of biodegradation of dissolved organic COI through a sulfate reduction pathway.

3.3.1.4 Carbon Dioxide

Laboratory measurements of carbon dioxide ranged from 59.7 mg/L (MW-22) to 499 mg/L (MW-505D) in the Galliard Formation monitoring wells. Carbon dioxide was reported at elevated concentrations (>250 mg/L) in all Galliard Formation wells (MW-12, MW-304, and MW-505D) with BTEX detections.

In the saprolite, SVOC-impacted well MW-311, reported a concentration of 329 mg/L for carbon dioxide. Wells in the saprolite not impacted by SVOCs reported lower concentrations of carbon dioxide, ranging from 61.1 mg/L (MW-310SAP) to 108 mg/L (MW-214).

Laboratory measurements of carbon dioxide in bedrock wells ranged from not detected (MW-503BR) to 172 mg/L (MW-318) in wells impacted with BTEX and from not detected (MW-508BR) to 269 mg/L (MW-512BR) in wells with detections of BTEX. Concentrations of carbon dioxide in bedrock wells do not appear to indicate evidence of biodegradation.

Dissolved concentrations of carbon dioxide mostly show the potential for biodegradation via reduction of carbon dioxide to methane. In addition, elevated dissolved concentrations of carbon dioxide in impacted wells in the Galliard Formation and saprolite may be evidence that biodegradation is occurring with carbon dioxide as a final end product of aerobic biodegradation.

3.3.2 Biodegradation Byproducts

As described previously, the distribution of reduced metabolic byproducts at a site can also provide evidence of natural biodegradation processes. A description of the biodegradation byproducts that were measured during the January 2015 groundwater monitoring event is provided in the following sections.

3.3.2.1 Methane

Within the Galliard Formation wells, methane concentrations ranged from not detected (several wells) to 150 µg/L (MW-303) in no BTEX detections, and from 3,700 µg/L (MW-12) to 9,800 µg/L (MW-505D) in wells impacted by BTEX.

Methane concentrations were not detected in two of the three wells in unimpacted saprolite wells, while the groundwater sample collected from MW-311 (impacted) indicated a methane concentration of 410 µg/L.

Methane concentrations in bedrock wells impacted by BTEX range from 8 µg/L in MW-503BR to 980 µg/L in MW-509BR. Methane concentrations in non-BTEX impacted bedrock wells ranged from not detected (MW-309BR and MW-507BR) to 4,900 µg/L (MW-512BR). Methane concentrations were lower in bedrock wells reporting not detected results of BTEX, except for MW-512BR which has historically had BTEX detections and has low detected concentrations of SVOCs.

The overall distribution of methane is consistent with the plume of dissolved MGP-related organic constituents (i.e., organic COI other than TCE), suggesting that the biodegradation of these constituents at the Site includes a methanogenic metabolic pathway.

3.3.2.2 Ferrous Iron

Ferrous iron concentrations in the Galliard Formation ranged from not detected (< 0.100 mg/L) in several wells to 32.7 mg/L in MW-304. Bedrock concentrations for ferrous iron ranged from not detected (<0.100 mg/L) in several wells to 6.53 mg/L in MW-315. Concentrations of ferrous iron were generally higher in wells impacted by BTEX and SVOCs.

The overall greater number of impacted wells containing elevated concentrations of ferrous iron indicates that biodegradation of dissolved MGP-related organic COI may be occurring at the Site through an iron reduction pathway.

3.3.3 *Summary of Natural Attenuation Evaluation*

The observed distributions of DO, ORP, CO_2, nitrate, sulfate, ferrous iron, and methane correspond to the distributions of dissolved MGP-related organic COI, and are therefore indicative of natural biodegradation processes.
AGLC plans to discontinue sample collection of MNA parameters until the corrective actions performed under the VRP have been completed.

3.3.4 *Quality Assurance, Quality Control, and Data Validation*

All field QA/QC data, and at least 10 percent of the VOC, SVOC, and inorganic data presented in the analytical reports, were reviewed by ERM's data validation specialist. Laboratory analytical reports for all samples are provided in Appendix B, and the data validation reports for VOC, SVOC, and inorganic data are included in Appendix D. These data were reviewed in accordance with the USEPA Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services (USEPA, 2008/2011).

As shown in Appendix D, ERM's data validation specialist reviewed sample delivery groups 1501859, 1501895, 1501A32, 1501A82, 1501B40, and 1501N94. The following items were included in the data validation review:

- Surrogate recoveries,
- Relative percent difference (RPD) between primary/field duplicate samples,
- Field and laboratory blank contamination,
- Holding times, sample receipt conditions, dilution factors, chains of custody,
- Trip blanks, and
- Sample duplicates.

As shown in Appendix D, the duplicate sample results received from the laboratory correlated well with those from parent samples collected during the January 2015 event; of a total of seventy-seven (77) RPD calculations, three calculations showed differences exceeding 30 percent between parent and duplicate samples. Each of the three exceedances occurred in sample MW-12-20150114-01. The analysis for oxygen in sample MW-12-20150114-01, one of the three analytes showing a differences of greater than 30 percent between parent and duplicate samples, was flagged as being outside of the fifteen-minute hold time for analysis under the reporting method. Other analytes with calculated differences in MW-12-20150114-01 exceeding 30 percent RPD between parent and duplicate samples include pyrene and acenaphthylene.

Three MS/MSD sample sets were collected and analyzed as part of the laboratory analytical batch QC (MW-207-20150129-01, MW-401-201501SAP-01, and MW-309-20150109-01). The data validation review (Appendix D) includes a detailed discussion of sample integrity.

As noted in Appendix D, the holding time of fifteen minutes was exceeded for all samples submitted for oxygen analysis to AES.

Following the January groundwater sampling event, QA/QC of the purge logs indicated that four wells (MW-207, MW-307D, MW-309BR, and MW-401SAP were incorrectly purged and either insufficient volume was removed or parameter were not stabilized prior to sample collection. Results for samples were invalidated and not included in the report but are included in the laboratory reports. The wells were resampled on January 29, 2015 and the results included in the report.

4.0 DATA COMPARISON AND SUMMARY

AGLC performed an empirical evaluation of the groundwater data collected from the beginning of the corrective action groundwater monitoring and evaluation program (2001) through present (January 2015) and compared the most recent data to the historic program dataset to determine if there were any trends toward improvement or degradation of groundwater quality.

Data comparison discussion for COI focus on benzene (the primary VOC contaminant), naphthalene (the primary SVOC contaminant), and TCE (the only chlorinated VOC COI).

Results of data queries are presented as historical data summary tables presented in Appendix E. Graphs reflecting temporal concentration changes of benzene and naphthalene are presented in Appendix F. Graphs were created for wells with historical detections of benzene and naphthalene.

4.1 ALLUVIUM WELLS

Based on the evaluation of dissolved-phase constituents in the alluvium wells during this monitoring period, no discernable groundwater plume exists in the alluvium aquifer. However, reported concentrations for benzene exceeded Type 1 RRS at MW-501S (35 µg/L) for the first time since the well was installed prior to the February 2007 sampling event. MW-501S will continue to be evaluated to assess concentration trends at this location.

4.2 GALLIARD WELLS

Data collected during the January 2015 monitoring event indicate the following:

- Naphthalene and benzene continue to be below their respective Type 1 RRS in Galliard Formation monitoring wells west of the Third Level Canal and east of King Street with the exception of MW-304.(Figure 3-6). The benzene concentration reported for MW-304 (27 µg/L) continues a decreasing concentration trend since the January 2010 concentration (800 µg/L). Although the naphthalene concentration was higher in January 2015 (27 µg/L) than in the July 2014 sampling event (12 µg/L), the overall trend is still decreasing.

- The extent of benzene and naphthalene concentrations reported to exceed the Type 1 RRS in the Galliard Formation north of the Site appears similar to those seen in recent (after January 2011) monitoring events. MW-603

continues to be the northern most impacted well and was not sampled in January 2015 due to the presence of DNAPL during gauging. DNAPL (1.45 feet) was detected using an interface probe while gauging well MW-603 during the January 2015 sampling event (Table 3-1). DNAPL was previous reported in MW-603 during the July 2013, January and July 2014 sampling events.

- MW-505D is located along the southern edge of the naphthalene plume. Detections of naphthalene at MW-505D were first reported in July 2012. The naphthalene concentration high was reported in July 2013 (870 µg/L). Since July 2012, an increase in methane concentrations along with a decrease in carbon dioxide concentrations and a drop in DO show potential for biodegradation to be occurring (Appendix E). Naphthalene concentrations were reported during January 2015 (4.2 µg/L) at a concentration below Type 1 RRS (20 µg/L) for the first time since January 2012.

- Concentrations of benzene and naphthalene remain highest in groundwater samples collected from the northeast corner of the southern parcel (MW-12), city ROW south of Block A (MW-600), and the western portion of Block E (MW-601). Groundwater samples collected from the Galliard monitoring wells MW-12, MW-600, and MW-601 report concentrations of benzene at 3,600 µg/L, 25,000 µg/L, and 6,900 µg/L, respectively; and naphthalene concentrations at 4,900 µg/L, 5,400 µg/L, and 6,500 µg/L, respectively (Figure 3-6).

- Groundwater samples collected from MW-21 and MW-401D reported concentrations of TCE above the Type 1 RRS (5 µg/L) at 18 µg/L and 18 µg/L, respectively. TCE has previously been detected in these wells and is not an MGP-related COI.

4.3 SAPROLITE WELLS

Six (6) saprolite monitoring wells were sampled during the January 2015 monitoring event. VOC concentrations exceeding Type 1 RRS were reported in two groundwater samples, benzene in sample MW-311 (370 µg/L) and TCE in sample MW-401SAP (20 µg/L). The January 2015 sample results from MW-311 had increased concentrations of benzene (370 µg/L) and naphthalene (560 µg/L) compared to recent events. However, concentrations remain well below historic highs at this location (Appendix F).

4.4 TRANSITION ZONE WELLS

Naphthalene was the only COI reported above Type 1 RRS in the transition zone monitoring well, MW-306TZ, sampled in January 2015. Naphthalene was reported in the groundwater sample collected from MW-306TZ at 300 µg/L. This concentration shows a continued decline from reported concentrations in February 2007 (6,800 µg/L) and January 2010 (4,800 µg/L). No other detections of COI were reported above their respective Type 1 RRS.

4.5 BEDROCK WELLS

Data collected during the January 2015 monitoring event indicate the following:

- Elevated concentrations of benzene and naphthalene continue to be present in the area northeast of the Northern Parcel near MW-307BR. Stable concentration trends of benzene and naphthalene continue to be observed at MW-307BR since pumping began the well.

- The highest concentrations of benzene were reported in MW-500BR located south of Northern Parcel on the southern side of the canal. Benzene concentrations appear to be trending upwards at this location (Appendix F).

- MW-319 continues to delineate Type 1 RRS exceedances in bedrock groundwater to the northeast. No COI were detected above Type 1 RRS in groundwater samples collected from MW-319.

- Bedrock well MW-315 delineates Type 1 RRS exceedances to the northwest. Bedrock well MW-507BR delineates the extent of naphthalene impacts in bedrock to the south-southwest in Block J, while bedrock well MW-508BR delineates the extent of naphthalene in bedrock to the southeast. Benzene and naphthalene were not detected in MW-507BR, MW-508BR, or MW-513BR during the January 2015 sampling event.

5.0 PERFORMANCE AND OPERATIONS OF BEDROCK GROUNDWATER EXTRACTION SYSTEM

Bedrock monitoring wells MW-307BR and MW-308BR were converted to groundwater extraction wells in 2006. The groundwater extraction and treatment system has been continuously operated since start up on November 30, 2006 with the exception of temporary shutdowns due to routine maintenance activities. MW-307BR and MW-308BR continue to be sampled through the extraction system as part of semiannual monitoring, but are no longer gauged. MW-308BR was sampled by use of a peristaltic pump during the January 2015 sampling event as the pump in the recovery well was damaged and not operational during the sampling event.

This section describes operations and maintenance (O&M) activities that were performed on the bedrock groundwater extraction and treatment system at the Site from September 1, 2015 through April 1, 2015. The program includes ongoing evaluation of the hydraulic containment induced by the groundwater extraction system, recommendations for continued monitoring, and corrective actions for operational issues. System performance in removing impacted mass during this period is also evaluated.

5.1 PERFORMANCE AND OPERATIONS

Effluent samples are collected monthly for the permitted discharge requirements, with additional analyses run on a quarterly basis as set forth by the City of Augusta. Discharge Monitoring Reports are submitted monthly to the City of Augusta Pretreatment Coordinator in accordance with permit requirements. Analytical results of samples collected between September 2014 and April 2015 are summarized in Table 5-1. There were no exceedances of the permit effluent limitations.

The treatment system has been running consistently since it was turned on (November 30, 2006), with only intermittent periods of shut down due routine repairs and maintenance. During this operational period (September 1, 2014 through April 3, 2015), the extraction system was shut down between September 22, 2014 – October 10, 2014 and December 29, 2014 – January 30, 2015 for carbon replacement (Table 5-2). During restart of the system on January 30, 2015, the groundwater pump connected to MW-308BR was found to be damaged. The system is currently operating with the use of MW-307BR only.

The total volume of groundwater extracted during this period of groundwater extraction was 1,445,752 gallons (630,506 gallons from MW-307BR and 815,246 gallons from MW-308BR) (Table 5-3). Activated carbon was changed out in

September 2014 and January 2015 to ensure optimal system operation and compliance with discharge requirements.

5.2 *MASS REDUCTION CALCULATIONS*

The total mass of benzene and naphthalene removed from bedrock groundwater during the period of system operation beginning September 1, 2014 and running through March 31, 2015 was calculated by multiplying the total volume extracted from the system by the concentration of benzene and naphthalene detected in each extraction well, where: *Mass (kilograms) = volume extracted (gallons) x concentration (µg/L).* The total calculated mass of benzene and naphthalene extracted from MW-307BR during this period was 28.64 kilograms and 19.33 kilograms, respectively. Similarly, the total mass of benzene and naphthalene extracted from MW-308BR was 20.37 kilograms and 10.49 kilograms, respectively. The input parameters for the mass reduction calculations are presented in Table 5-3. These calculations will continue to be performed during each monitoring period. Graphs showing the trends of the mass removal are provided in Appendix G.

6.0 CONCLUSIONS

The following conclusions are derived from the data and analyses presented in this report:

- The only exceedance of organic COI in alluvium monitoring wells sampled in January 2015 was for benzene in MW-501S. The benzene exceedance in MW-501S was the first since installation of the well. Benzene will continue to be monitored at this location.

- Arsenic in MW-408S and cadmium in MW-501S were the only inorganic COI reported to exceed Type 1 RRS in alluvium monitoring wells.

- The distribution of dissolved organic COI is generally consistent with previous events and provides continued evidence that the Galliard and bedrock plumes are stable.

- Six (6) wells in the Galliard Formation (MW-12, MW-21, MW-304, MW-401D, MW-600, and MW-601) exceeded RRS for select organic COI. The sole RRS exceedance in MW-21 (located approximately 1300 feet east of the Northern Parcel) was TCE, which is not an MGP-related constituent.

- Selenium (MW-207), cadmium (MW-401D), and arsenic (MW-408DR) were the only inorganic COI exceeding Type 1 RRS in Galliard groundwater samples during the January 2015 sampling event.

- DNAPL was observed in three wells (MW-205, MW-502D, and MW-603), located within the Galliard groundwater plume during the January 2015 sampling event, and these wells were not sampled.

- Organic COI concentrations exceeding Type 1 RRS were reported in two groundwater samples collected from wells installed in the saprolite unit, benzene and naphthalene in sample MW-311 and TCE in sample MW-401SAP. Benzene and naphthalene concentrations remain well below historic highs in MW-311 (Appendix F).

- Nickel was reported in MW-306SAP and MW-310SAP in excess of the RRS. No other inorganic COI exceeded RRS in January 2015.

- The groundwater sample collected from MW-306TZ in July 2014 exceeded the Type 1 RRS for naphthalene only. There were no other RRS exceedances in transition zone wells sampled during this event.

- Benzene was the only VOC that exceeded Type 1 RRS in the following bedrock wells: MW-318, MW-503BR, MW-509BR, MW-510BR, and MW-511BR. Benzene and ethylbenzene exceeded Type 1 RRS in the following

bedrock wells: MW-213, MW-307BR, and MW-500BR. Benzene, ethylbenzene, and toluene exceedances were reported in MW-308BR.

- One or more SVOCs were detected in eight (8) bedrock monitoring wells in excess of RRS.

- Cadmium exceeded Type 1 RRS in well MW-325. There were no other inorganic COI exceedances during the January 2015 sampling event.

- Removal of contaminant mass has continued since the bedrock extraction and treatment system began operating in November 2006. The cumulative mass of benzene removed by the system since operation began totals 755.27 kilograms. The cumulative mass of naphthalene removed by the system since operation began totals 466.09 kilograms.

- AGLC proposes discontinuing MNA sampling until the corrective action has been completed.

The next semiannual groundwater monitoring event will be performed in July 2015 and the 18th Semiannual Corrective Action Effectiveness Report will be submitted as an appendix to a Semiannual Status Report in the VRP.

7.0 REFERENCES

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Tables

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Table 2-1
Monitoring Well Network Summary
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Well ID	Hydrogeologic Unit	Well Monitoring Status	Location
Alluvium Monitoring Wells			
MW-05*	Alluvium	Gauge and Sample	On-site
MW-17		Gauge Only	On-site
MW-306S		Gauge Only	Off-site
MW-401S		Gauge and Sample	Off-site
MW-402S		Gauge and Sample	On-site
MW-408S		Gauge and Sample	Off-site
MW-501S		Gauge and Sample	Off-site
Galliard Formation Monitoring Wells			
MW-12	Galliard	Gauge and Sample	On-site
MW-19		Gauge and Sample	On-site
MW-21		Gauge and Sample	Off-site
MW-22		Gauge and Sample	Off-site
MW-24	Upper Galliard	Gauge Only	Off-site
MW-25		Gauge Only	Off-site
MW-202DR	Galliard	Gauge and Sample	On-site
MW-203	Middle Galliard	Gauge and Sample	On-site
MW-205	Galliard	Gauge and Sample	On-site
MW-206		Gauge and Sample	Off-site
MW-207		Gauge and Sample	On-site
MW-303		Gauge and Sample	Off-site
MW-304		Gauge and Sample	Off-site
MW-306D		Gauge and Sample	Off-site
MW-307D		Gauge and Sample	Off-site
MW-309D		Gauge Only	Off-site
MW-310D		Gauge Only	On-site
MW-401D		Gauge and Sample	Off-site
MW-402D		Gauge and Sample	On-site
MW-404DR		Gauge and Sample	Off-site
MW-408D		Gauge and Sample	Off-site
MW-502D		Gauge and Sample	On-site
MW-505D		Gauge and Sample	Off-site
MW-600		Gauge and Sample	Off-site
MW-601		Gauge and Sample	On-site
MW-602		Gauge and Sample	Off-site
MW-603		Gauge and Sample	Off-site

Well ID	Hydrogeologic Unit	Well Monitoring Status	Location
Saprolite Monitoring Wells			
MW-214	Saprolite	Gauge and Sample	Off-site
MW-306SAP		Gauge and Sample	Off-site
MW-307SAP		Gauge and Sample	Off-site
MW-310SAP		Gauge and Sample	On-site
MW-311		Gauge and Sample	On-site
MW-401SAP		Gauge and Sample	Off-site
Transition Zone and Bedrock Monitoring Wells			
MW-213	Bedrock	Gauge and Sample	On-site
MW-306TZ	Transition Zone	Gauge and Sample	Off-site
MW-306BR	Bedrock	Gauge and Sample	Off-site
MW-307TZ	Transition Zone	Gauge Only	Off-site
MW-307BR	Bedrock	Gauge and Sample	Off-site
MW-308BR		Gauge and Sample	On-site
MW-309BR		Gauge and Sample	Off-site
MW-310BR		Gauge and Sample	On-site
MW-313		Gauge and Sample	Off-site
MW-315		Gauge and Sample	Off-site
MW-316		Gauge Only	Off-site
MW-318		Gauge and Sample	Off-site
MW-319		Gauge and Sample	Off-site
MW-320		Gauge and Sample	Off-site
MW-321		Gauge and Sample	Off-site
MW-322		Gauge Only	Off-site
MW-323		Gauge Only	Off-site
MW-324		Gauge and Sample	Off-site
MW-325		Gauge and Sample	Off-site
MW-500BR		Gauge and Sample	Off-site
MW-503BR		Gauge and Sample	Off-site
MW-504BR		Gauge and Sample	Off-site
MW-507BR		Gauge and Sample	Off-site
MW-508BR		Gauge and Sample	On-site
MW-509BR		Gauge and Sample	Off-site
MW-510BR		Gauge and Sample	Off-site
MW-511BR		Gauge and Sample	Off-site
MW-512BR		Gauge and Sample	Off-site
MW-513BR		Gauge and Sample	Off-site

Notes:
D - denotes well screened in the Galliard Formation
BR - denotes bedrock well (where used in well name)
TZ - denotes well screened in the Transition Zone in DDSP wells
Only those wells that are still considered active (e.g., not destroyed or abandoned) are included in this table.
* MW-05 Destroyed during Canal Authority's path improvements along canal

Table 2-2
Monitoring Well Construction Summary
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Date Installed	Well Type	Well Materials	Ground Surface Elevation (ft AMSL)	Top of Casing Elevation (ft AMSL)	Screened Interval (ft bgs)
Alluvium Monitoring Wells						
MW-05*	10/19/1985	II	PVC	130.00	132.11	4.2 - 18.6
MW-17	2/2/1992	II	SS	136.60	138.85	12.4 - 16.7
MW-306S	11/6/1998	DDSP	PVC	132.08	131.96	8.5 - 9.5
MW-401S	8/31/2000	II	PVC	134.44	136.89	10 - 20
MW-402S	8/30/2000	II	PVC	136.88	136.89	9 - 19
MW-408S	10/18/2000	II	PVC	133.65	133.31	10 - 20
MW-501S	1/17/2007	II	PVC	132.98	132.80	7 - 12
Galliard Formation Monitoring Wells						
MW-12	5/15/1986	II	PVC	131.80	131.31	20 - 30
MW-19	2/4/1992	II	SS	138.70	140.37	15.3 - 19.7
MW-21	12/8/1992	II	SS	129.80	128.54	22.3 - 27.9
MW-22	5/4/1994	II	PVC	130.60	129.60	18.3 - 22.3
MW-24	5/6/1994	II	PVC	131.10	130.21	8.3 - 12.3
MW-25	5/6/1994	II	PVC	129.80	128.88	18.9 - 22.9
MW-202DR	1/24/2007	II	PVC	131.70	131.59	24.5- 29.5
MW-203	11/14/1995	II	PVC	131.70	130.74	22.1 - 26.0
MW-205	11/22/1995	II	SS	132.20	130.94	23.3 - 28.1
MW-206	11/28/1995	II	PVC	130.90	130.06	23.9 - 27.8
MW-207	10/11/1995	II	PVC	130.40	132.68	20.6 - 24.6
MW-211	10/11/1995	II	PVC	139.60	138.59	20.5 - 24.4
MW-303	11/18/1998	II	PVC	129.63	129.37	25.5 - 30.5
MW-304	11/2/1998	II	PVC	131.63	131.51	31 - 36
MW-306D	11/6/1998	DDSP	PVC	132.08	131.89	24.5 - 25.5
MW-307D	11/10/1998	DDSP	PVC	130.53	130.45	24.5 - 25.5
MW-309D	11/8/1998	DDSP	PVC	129.97	129.79	27.5 - 28.5
MW-310D	11/3/1998	DDSP	PVC	138.79	138.70	27 - 28
MW-401D	8/31/2000	II	PVC	134.37	134.38	33 - 36
MW-402D	8/30/2000	II	PVC	136.89	136.95	24.7 - 26.2
MW-404DR	1/30/2007	II	PVC	133.10	133.15	16.5 - 21.5
MW-408D	2/22/2011	II	PVC	133.46	133.02	25 - 30
MW-502D	1/30/2007	II	PVC	131.20	131.18	20 - 26
MW-505D	1/31/2007	II	PVC	128.87	128.87	23.5 - 28.5
MW-600	10/19/2010	II	PVC	131.34	131.02	22 - 32
MW-601	10/20/2010	II	PVC	131.10	130.82	17 - 27
MW-602	10/19/2010	II	PVC	130.55	130.20	22 - 32
MW-603	10/19/2010	II	PVC	130.80	130.65	17 - 27

Notes:

ft AMSL - feet above mean sea level
ft bgs - feet below ground surface
II - double casing well
III - triple casing well
PVC - polyvinyl chloride
SS - stainless steel
Only active monitoring wells are included in this table.
DDSP - depth discrete sampling port
* MW-5 destroyed during Canal Authority's path improvement along canal

Table 2-2
Monitoring Well Construction Summary
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Date Installed	Well Type	Well Materials	Ground Surface Elevation (ft AMSL)	Top of Casing Elevation (ft AMSL)	Screened Interval (ft bgs)
Saprolite Monitoring Wells						
MW-214	12/7/1995	II	PVC	130.60	129.65	52.6 - 56.6
MW-306SAP	11/6/1998	DDSP	PVC	132.08	131.92	30.5 - 31.5
MW-307SAP	11/10/1998	DDSP	PVC	130.53	130.48	30.5 - 31.5
MW-309SAP	11/8/1998	DDSP	PVC	129.97	129.82	34.5 - 35.5
MW-310SAP	11/3/1998	DDSP	PVC	138.79	138.72	34 - 35
MW-311	11/20/1998	II	PVC	130.32	130.11	30 - 32
MW-317	9/6/2000	II	PVC	130.90	130.64	31 - 41
MW-401SAP	8/31/2000	II	PVC	134.23	134.27	38 - 48
Transition Zone and Bedrock Monitoring Wells						
MW-213	12/8/1995	III	PVC	131.90	130.92	58.5 - 62.5
MW-306BR	11/23/1998	III	PVC	132.03	131.81	55 - 80
MW-306TZ	11/6/1998	DDSP	PVC	132.08	131.93	58.5 - 59.5
MW-307BR	11/22/1998	III	PVC	130.75	130.27	48 - 73.25
MW-307TZ	11/10/1998	DDSP	PVC	130.53	130.48	46.5 - 47.5
MW-308BR	11/21/1998	III	PVC	131.34	131.08	55.5 - 80.5
MW-309BR	11/24/1998	III	PVC	129.84	129.54	83.75 - 109
MW-309TZ	11/8/1998	DDSP	PVC	129.97	129.76	76.5 - 77.5
MW-310BR	11/25/1998	III	PVC	139.72	139.49	65 - 90
MW-310TZ	11/3/1998	DDSP	PVC	138.79	138.72	73 - 74
MW-313	8/10/2000	III	PVC	129.01	129.02	61 - 86
MW-315	8/10/2000	III	PVC	131.91	131.74	59.5 - 85.5
MW-316	9/1/2000	III	PVC	130.71	130.51	88 - 119.8
MW-318	9/8/2000	III	PVC	130.94	130.75	62 - 87
MW-319	12/13/2000	III	PVC	133.20	132.98	55 - 80
MW-320	1/6/2001	III	PVC	132.08	131.74	70 - 76
MW-321	1/19/2001	III	PVC/SS	130.86	130.48	160 - 170.2
MW-322	12/14/2000	III	PVC	130.69	130.65	49 - 86
MW-323	12/15/2000	III	PVC	130.65	130.53	70.5 - 95
MW-324	5/31/2001	III	PVC/SS	130.83	130.98	209 - 215
MW-325	5/22/2001	III	PVC	131.53	131.44	95 - 115
MW-500BR	1/24/2007	III	PVC	132.76	132.66	64 - 79
MW-503BR	9/5/2008	III	PVC	131.80	131.57	56 - 76
MW-504BR	9/4/2008	III	PVC	131.10	130.91	60 - 80
MW-506BR	8/27/2008	III	PVC	139.70	139.23	66 - 81
MW-507BR	8/25/2008	III	PVC	139.10	138.76	106 - 125
MW-508BR	8/25/2008	III	PVC	130.50	133.26	70 - 86
MW-509BR	9/18/2009	III	PVC	131.10	130.63	56 - 76
MW-510BR	9/15/2008	III	PVC	131.00	130.76	60 - 80
MW-511BR	9/9/2008	III	PVC	131.20	130.82	56 - 76
MW-512BR	8/29/2008	III	PVC	132.00	131.70	64 - 84
MW-513BR	10/20/2010	III	PVC	132.40	132.03	51.5 - 82

Notes:

ft AMSL - feet above mean sea level
ft bgs - feet below ground surface
II - double casing well
III - triple casing well
PVC - polyvinyl chloride
SS - stainless steel
Only exisitng monitoring wells are included in this table.
DDSP - depth discrete sampling port

Table 2-3
Site-Specific Constituents of Interest and Monitored Natural Attenuation Parameters
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Volatile Organic Compounds (VOCs), (SW-846 Method 8260B)		
Acetone	Ethylbenzene	Trichloroethylene
Benzene	Methylene Chloride	Xylenes (total)
Carbon Disulfide	Toluene	
Semivolatile Organic Compounds (SVOCs), (SW-846 Method 8270C)		
Acenaphthene	Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene
Acenaphthylene	Benzo(k)fluoranthene	Naphthalene
Anthracene	Chrysene	Phenanthrene
Benzo(a)anthracene	Dibenzo(a,h)anthracene	Pyrene
Benzo(a)pyrene	Fluoranthene	
Benzo(b)fluoranthene	Fluorene	
Inorganics (SW-846 Methods 6010B, 7470A, 6020, and 9010/9012)		
Antimony	Copper	Thallium
Arsenic	Cyanide	Vanadium
Barium	Lead	Zinc
Beryllium	Mercury	
Cadmium	Nickel	
Chromium	Selenium	
Monitored Natural Attenuation Parameters		
Dissolved Gases (O_2, CO_2, Methane)	Ferrous Iron	Sulfate
	Nitrate	

Table 3-1
Depth to Water and Groundwater Elevations
January 12, 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Hydrogeologic Unit	Top of Casing (ft AMSL)	Well Casing Total Depth (ft BTOC)	Depth to Water (ft BTOC)	Groundwater Elevation (ft AMSL)	Thickness of NAPL (ft)
Alluvium Monitoring Wells						
MW-05	Alluvium	132.11	19.5	Destroyed		--
MW-17	Alluvium	138.85	16.94	11.63	127.22	--
MW-306S	Alluvium	131.96	8.6	7.38	124.58	--
MW-401S	Alluvium	136.89	19.15	10.19	126.70	--
MW-402S	Alluvium	136.89	19.25	13.62	123.27	--
MW-408S	Alluvium	133.31	19.1	8.35	124.96	--
MW-501S	Alluvium	132.80	11.68	7.20	125.60	--
Galliard Formation Monitoring Wells						
MW-12	Galliard	131.31	26.65	7.43	123.88	--
MW-19	Galliard	140.37	19.05	12.66	127.71	--
MW-21	Galliard	128.54	29.15	6.88	121.66	--
MW-22	Galliard	129.60	22.6	5.68	123.92	--
MW-24	Galliard	130.21	22.59	6.47	123.74	--
MW-25	Galliard	128.88	23.4	5.11	123.77	--
MW-202DR	Galliard	131.59	29.12	7.52	124.07	--
MW-203	Galliard	130.74	26.55	6.79	123.95	--
MW-205	Galliard	130.94	26.6	6.92	124.02	NAPL on probe, not measurable amount
MW-206	Galliard	130.06	28.35	6.12	123.94	--
MW-207	Galliard	132.68	26	6.03	126.65	--
MW-303	Galliard	129.37	30.55	6.14	123.23	--
MW-304	Galliard	131.51	36.12	8.43	123.08	--
MW-306D	Galliard	131.89	24.46	7.71	124.18	--
MW-307D	Galliard	130.45	23.98	5.78	124.67	--
MW-309D	Galliard	129.79	27.62	6.28	123.51	--
MW-310D	Galliard	138.70	27.4	14.31	124.39	--
MW-401D	Galliard	134.38	35.91	10.18	124.20	--
MW-402D	Galliard	136.95	26.41	12.72	124.23	--
MW-404DR	Galliard	133.15	21.47	7.55	125.60	--
MW-408DR	Galliard	133.02	29.8	8.35	124.67	--
MW-502D	Galliard	131.18	25.7	6.99	124.19	NAPL on probe, not measurable amount
MW-505D	Galliard	128.87	28.5	5.19	123.68	--
MW-600	Galliard	131.02	32	5.81	125.21	--
MW-601	Galliard	130.82	27	6.82	124.00	--
MW-602	Galliard	130.20	32	7.50	122.70	--
MW-603	Galliard	130.65	27	6.35	124.30	1.45

Notes:

ft = Feet

AMSL = above mean sea level

BTOC = below top of casing

NAPL = non-aqueous phase liquid

Table 3-1
Depth to Water and Groundwater Elevations
January 12, 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Monitoring Well ID	Hydrogeologic Unit	Top of Casing (ft AMSL)	Well Casing Total Depth (ft BTOC)	Depth to Water (ft BTOC)	Groundwater Elevation (ft AMSL)	Thickness of NAPL (ft)
Saprolite Monitoring Wells						
MW-214	Saprolite	129.65	57.1	6.72	122.93	--
MW-306SAP	Saprolite	131.92	31.23	7.71	124.21	--
MW-307SAP	Saprolite	130.48	29.75	7.31	123.17	--
MW-310SAP	Saprolite	138.72	34.11	14.40	124.32	--
MW-311	Saprolite	130.11	32.3	6.46	123.65	--
MW-401SAP	Saprolite	134.27	42.8	9.94	124.33	--
Transition Zone and Bedrock Monitoring Wells						
MW-213	Bedrock	130.92	62.31	7.77	123.15	--
MW-306TZ	TransZone	131.93	57.82	8.09	123.84	--
MW-306BR	Bedrock	131.81	78.99	8.04	123.77	--
MW-309BR	Bedrock	129.54	106	7.30	122.24	--
MW-310BR	Bedrock	139.49	89.23	9.51	129.98	--
MW-313	Bedrock	129.02	85.6	6.53	122.49	--
MW-315	Bedrock	131.74	85.51	7.77	123.97	--
MW-316	Bedrock	130.51	118.01	7.20	123.31	--
MW-318	Bedrock	130.75	87.15	7.47	123.28	--
MW-319	Bedrock	132.98	79.6	8.90	124.08	--
MW-320	Bedrock	131.74	68.44	8.50	123.24	--
MW-321	Bedrock	130.48	170	7.21	123.27	--
MW-322	Bedrock	130.65	86.1	7.32	123.33	--
MW-323	Bedrock	130.53	95	7.68	122.85	--
MW-324	Bedrock	130.98	215	7.76	123.22	--
MW-325	Bedrock	131.44	108.08	10.15	121.29	--
MW-500BR	Bedrock	132.66	54.9	8.84	123.82	--
MW-503BR	Bedrock	131.57	76	7.67	123.90	--
MW-504BR	Bedrock	130.91	80	7.02	123.89	--
MW-506BR	Bedrock	139.22	81	Destroyed		--
MW-507BR	Bedrock	138.75	126	16.87	121.88	--
MW-508BR	Bedrock	133.25	87	9.94	123.31	--
MW-509BR	Bedrock	130.63	76	6.85	123.78	--
MW-510BR	Bedrock	130.75	80	6.99	123.76	--
MW-511BR	Bedrock	130.82	76	6.98	123.84	--
MW-512BR	Bedrock	131.69	84	7.83	123.86	--
MW-513BR	Bedrock	132.03	82	8.49	123.54	--

Notes:

Created by: DGD

Checked by: BM

ft = Feet

AMSL = above mean sea level

BTOC = below top of casing

NAPL = non aqueous phase liquid

NM = not measured

MW-307BR and MW-308BR are used for groundwater extraction and depth to groundwater measurements are not collected

Table 3-2
Groundwater Analytical Results for Alluvium Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-05	MW-401S	MW-402S	MW-408S	MW-501S
		Sample Date	--	1/15/2015	1/12/2015	1/15/2015	1/15/2015
		Sample Type	Destroyed	N	N	N	N
Field Parameters	**Type 1**	**Units**					
Specific Conductivity	**--**	mS/cm	--	0.487	0.586	1.60	0.642
Dissolved Oxygen	**--**	mg/L	--	1.37	0.46	0.71	0.90
Oxidation-Reduction Potential	**--**	mV	--	51.6	210.1	-153.6	65.4
pH	**--**	pH units	--	5.38	5.90	7.36	6.35
Temperature	**--**	deg C	--	13.5	17.7	11.8	12.4
Turbidity	**--**	NTU	--	7.47	1.70	22.1	8.60
MNA							
Carbon dioxide	--	mg/L	--	168	--	--	323
Iron, as Ferrous (Fe+2)	--	mg/L	--	< 0.100	--	--	< 0.100
Methane	--	µg/L	--	< 4	--	--	< 4
Nitrate as N	--	mg/L	--	2.50	--	--	< 0.25
Oxygen	--	mg/L	--	7.46	--	--	8.62
Sulfate	--	mg/L	--	62	--	--	61
VOCs							
Acetone	4,000	µg/L	--	< 50	< 50	< 50	< 50
Benzene	5	µg/L	--	< 5.0	< 5.0	< 5.0	**35**
Carbon disulfide	4,000	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	--	< 5.0	< 5.0	< 5.0	**5.3**
Methylene chloride	5	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	--	< 5.0	< 5.0	< 5.0	**7.4**
Trichloroethene	5	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes	10,000	µg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
SVOCs							
Acenaphthene	2,000	µg/L	--	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	10	µg/L	--	< 1.0	< 1.0	< 1.0	< 1.0
Anthracene	10	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(a)anthracene	0.1	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	--	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	--	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Chrysene	0.2	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	--	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	--	< 0.10	< 0.10	**0.26**	< 0.10
Fluorene	1,000	µg/L	--	< 0.10	< 0.10	**0.40**	< 0.10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Naphthalene	20	µg/L	--	< 0.50	< 0.50	< 0.50	**5.0**
Phenanthrene	10	µg/L	--	< 0.050	< 0.050	< 0.050	< 0.050
Pyrene	1,000	µg/L	--	**0.064**	< 0.050	**0.096**	< 0.050
Inorganics							
Antimony	0.006	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	--	< 0.0500	< 0.0500	**0.222**	< 0.0500
Barium	2	mg/L	--	**0.112**	**0.0777**	**0.444**	**0.103**
Beryllium	0.004	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	--	< 0.0050	< 0.0050	< 0.0050	**0.0153**
Chromium	0.1	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Copper	1.3	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	--	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Mercury	0.002	mg/L	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Selenium	0.05	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Thallium	0.002	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Zinc	2	mg/L	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
-- = Not Analyzed

Table 3-3
Groundwater Analytical Results for Galliard Formation Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-12	MW-12	MW-19	MW-21	MW-22	MW-202DR	MW-203	MW-205	MW-206	MW-207	MW-303	MW-304	MW-306D	MW-307D	MW-401D	MW-402D	MW-404DR	MW-408DR	MW-502D	MW-505D	MW-600	MW-601	MW-602	MW-603
		Sample Date	1/14/2015	1/14/2015	1/14/2015	1/12/2015	1/13/2015	1/13/2015	1/14/2015	1/14/2015	1/14/2015	1/29/2015	1/13/2015	1/15/2015	1/13/2015	1/29/2015	1/14/2015	1/13/2015	1/14/2015	1/15/2015	1/15/2015	1/15/2015	1/14/2015	1/14/2015	1/13/2015	1/13/2015
		Sample Type	N	DUP-03	N	N	N	N	N	DNAPL	N	N	N	N	N	N	N	N	N	N	DNAPL	N	N	N	N	DNAPL
Field Parameters	**Type 1 RRS**	**Units**																								
Specific Conductivity	--	mS/cm	0.252	0.252	0.529	0.614	0.196	0.524	0.224	--	0.711	0.604	0.545	0.448	0.635	0.457	0.513	0.615	0.450	1.31	--	0.434	0.257	0.529	0.613	--
Dissolved Oxygen	--	mg/L	0.33	0.33	0.77	0.42	2.08	1.29	1.72	--	7.73	0.23	0.57	0.32	0.21	2.64	1.33	0.44	3.19	0.84	--	0.29	0.18	0.28	0.62	--
Oxidation-Reduction Potential	--	mV	-11.2	-11.2	113.4	63.9	-22.3	-16.1	69.3	--	42.6	-58.2	-4.2	-47.1	10.7	1.9	-41.9	193.1	-41.7	-103.5	--	-67.0	-71.3	-42.8	-33.0	--
pH	--	pH units	5.46	5.46	5.84	6.06	6.13	6.13	6.28	--	8.29	6.09	5.69	6.04	5.94	6.43	6.17	6.0	6.06	6.29	--	6.07	6.10	5.92	5.77	--
Temperature	--	deg C	12.40	12.40	16.00	17.30	15.50	16.50	15.60	--	12.40	18.17	15.50	14.60	19.10	19.53	14.70	16.20	15.30	13.70	--	15.70	17.90	15.80	17.40	--
Turbidity	--	NTU	1.47	1.47	1.55	2.97	0.35	1.74	1.70	--	8.75	24.8	1.24	0.94	3.61	4.28	5.05	6.44	2.84	20.1	--	9.80	53.0	3.12	15.5	--
MNA																										
Carbon dioxide	--	mg/L	251	259	236	--	59.7	196	81.2	--	319	--	168	305	--	--	95.9	144	253	137	--	499	--	--	--	--
Iron, as Ferrous (Fe+2)	--	mg/L	6.66	7.79 H	< 0.100	--	< 0.100	< 0.100	< 0.100	--	< 0.100	--	6.83	32.7	--	--	< 0.100	< 0.100	< 0.100	3.85	--	23.4	--	--	--	--
Methane	--	µg/L	3,000	3,700	< 4	--	< 4	< 4	< 4	--	7	--	150	6,700	--	--	< 4	< 4	< 4	6,600	--	9,800	--	--	--	--
Nitrate as N	--	mg/L	< 0.25	< 0.25	0.70	--	0.63	0.31	0.51	--	< 0.25	--	< 0.25	< 0.25	--	--	0.74	1.5	< 0.25	< 0.25	--	< 0.25	--	--	--	--
Oxygen	--	mg/L	3.02 H	5.98 H	7.50	--	8.02	8.27	9.08	--	9.41	--	7.89	7.48	--	--	9.09	7.79	8.96	7.78	--	7.58	--	--	--	--
Sulfate	--	mg/L	< 1.0	< 1.0	87	--	24	56	13	--	6.8	--	< 1.0	< 1.0	--	--	130	56	78	< 1.0	--	< 1.0	--	--	--	--
VOCs																										
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	< 50	< 25,000	< 5,000	< 50	--
Benzene	5	µg/L	**3,500**	**3,600**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	**27**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	**25,000**	**6,900**	< 5.0	--
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 2,500	< 500	< 5.0	--
Ethylbenzene	700	µg/L	**930**	**990**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	**13**	< 2,500	**960**	< 5.0	--
Methylene chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 2,500	< 500	< 5.0	--
Toluene	1,000	µg/L	**720**	**740**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	**8,500**	**2,100**	< 5.0	--
Trichloroethene	5	µg/L	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**18**	< 5.0	< 5.0	< 5.0	--	< 5.0	< 2,500	< 500	< 5.0	--
Xylenes	10,000	µg/L	**940**	**980**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	**9.6**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	**6.8**	**2,600**	**1,900**	< 5.0	--
SVOCs																										
Acenaphthene	2,000	µg/L	**69**	**73**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	< 0.50	< 0.50	< 0.50	**31**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	< 0.50	**14**	**12**	**1.6**	--
Acenaphthylene	10	µg/L	**1.7**	**3.3**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	< 1.0	**120**	**45**	< 1.0	--
Anthracene	10	µg/L	**1.5**	**1.9**	**0.092**	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.051**	**0.087**	**0.54**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**2.4**	**4.4**	**0.10**	--
Benzo(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.38**	< 0.050	< 0.050	--
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.075**	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	**0.051**	**0.30**	< 0.050	< 0.050	--
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	**0.28**	< 0.10	< 0.10	--
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**0.12**	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	**0.11**	**0.16**	< 0.10	< 0.10	--
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.068**	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.085**	< 0.050	< 0.050	--
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**0.30**	< 0.050	< 0.050	--
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**0.13**	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	**0.11**	< 0.10	< 0.10	< 0.10	--
Fluoranthene	1,000	µg/L	**0.26**	**0.35**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	**0.11**	**0.40**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	**1.2**	**0.49**	< 0.10	--
Fluorene	1,000	µg/L	**18**	**23**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	**4.4**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	**20**	**36**	**0.22**	--
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.13**	--	< 0.050	< 0.050	< 0.050	**0.064**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	**0.10**	**0.11**	< 0.050	< 0.050	--
Naphthalene	20	µg/L	**3,700**	**4,900**	< 0.50	< 0.50	**2.8**	**2.7**	< 0.50	--	**1.8**	< 0.50	< 0.50	**27**	< 0.50	< 0.50	**5.1**	< 0.50	**3.3**	< 0.50	--	**4.2**	**5,400**	**6,500**	< 0.50	--
Phenanthrene	10	µg/L	**11**	**14**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**3.2**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**15**	**17**	< 0.050	--
Pyrene	1,000	µg/L	**0.23**	**0.32**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	**0.11**	**0.42**	< 0.050	**0.079**	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	**1.8**	**0.47**	< 0.050	--
Inorganics					--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.006	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	--	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.429**	--	< 0.0500	< 0.0500	< 0.0500	< 0.0500	--
Barium	2	mg/L	**0.231**	**0.236**	**0.0824**	**0.0854**	**0.0300**	**0.0536**	**0.0758**	--	**0.201**	**0.323**	**0.0888**	**0.324**	**0.377**	**0.0712**	**0.0847**	**0.0768**	**0.0678**	**0.448**	--	**0.342**	**0.157**	**0.275**	**0.491**	--
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0358**	< 0.0050	< 0.0050	< 0.0050	--	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	**0.0312**	< 0.0100	**0.0221**	--
Cyanide	0.2	mg/L	< 0.010	**0.012**	**0.020**	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	**0.022**	< 0.010	--
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--
Nickel	0.1	mg/L	< 0.0200	< 0.0200	**0.0275**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	**0.0687**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--
Vanadium	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.0607**	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.0747**	< 0.0200	< 0.0200	< 0.0200	**0.0312**	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0387**	< 0.0200	< 0.0200	< 0.0200	--	**0.0202**	**0.208**	**0.0379**	**0.165**	--

Notes:
N = Normal sample
DUP = Duplicate sample
DNAPL - Well not sampled due to presence of DNAPL
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-4
Groundwater Analytical Results for Saprolite Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-214	MW-306SAP	MW-307SAP	MW-310SAP	MW-311	MW-401SAP	MW-401SAP
		Sample Date	13-Jan-15	14-Jan-15	13-Jan-15	13-Jan-15	15-Jan-15	29-Jan-15	29-Jan-15
		Sample Type	N	N	N	N	N	N	DUP-06
Field Parameters	**Type 1 RRS**	**Units**							
Specific Conductivity	--	mS/cm	0.226	1.390	0.564	0.458	0.426	0.286	0.286
Dissolved Oxygen	--	mg/L	0.45	1.21	0.37	0.33	0.43	1.97	1.97
Oxidation-Reduction Potential	--	mV	-73.5	-23.2	34.3	174.7	-111.5	98.6	98.6
pH	--	pH units	6.51	6.06	6.06	5.61	6.24	5.94	5.94
Temperature	--	deg C	16.60	15.40	17.60	16.50	13.90	7.50	17.92
Turbidity	--	NTU	2.19	12.8	0.39	0.77	8.61	0.84	0.84
MNA									
Carbon dioxide	--	mg/L	108	--	--	61.1	329	65.5	60.4
Iron, as Ferrous (Fe+2)	--	mg/L	2.56	--	--	< 0.100	4.15	< 0.100	< 0.100
Methane	--	µg/L	410	--	--	< 4	410	< 4	< 4
Nitrate as N	--	mg/L	< 0.25	--	--	9.8	< 0.25	2.6	2.4
Oxygen	--	mg/L	7.17 H	--	--	7.96 H	7.2 H	8.44 H	8.45 H
Sulfate	--	mg/L	< 1.0	--	--	24	< 1.0	43	41
VOCs									
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**370**	< 5.0	< 5.0
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**94**	< 5.0	< 5.0
Methylene chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**9.6**	< 5.0	< 5.0
Trichloroethene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**19**	**20**
Xylenes	10,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**41**	< 5.0	< 5.0
SVOCs									
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	**13**	< 0.50	< 0.50
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**3.2**	< 1.0	< 1.0
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.56**	< 0.050	< 0.050
Benzo(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**5.5**	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Naphthalene	20	µg/L	< 0.50	**0.66**	< 0.50	< 0.50	**560**	< 0.50	< 0.50
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**3.3**	< 0.050	< 0.050
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Inorganics									
Antimony	0.006	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0200	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Barium	2	mg/L	**0.338**	**0.648**	**0.0649**	**0.0749**	**0.185**	**0.0576**	**0.0566**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.010	< 0.0100	**0.0117**	< 0.0100	< 0.0100	< 0.0100
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	< 0.010	**0.010**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.00036**	**0.00034**
Nickel	0.1	mg/L	< 0.0200	**0.151**	< 0.0200	**0.336**	< 0.0200	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-5
Groundwater Analytical Results for Transition Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

		Location ID	MW-306TZ	MW-306TZ
		Sample Date	1/13/2015	1/13/2015
		Sample Type	N	DUP-01
Field Parameters	**Type 1 RRS**	**Units**		
Specific Conductivity	--	mS/cm	0.729	0.729
Dissolved Oxygen	--	mg/L	0.20	0.20
Oxidation-Reduction Potentia	--	mV	-84.9	-84.9
pH	--	pH units	6.61	6.61
Temperature	--	deg C	19.6	19.6
Turbidity	--	NTU	1.03	1.03
MNA				
Carbon dioxide	--	mg/L	--	--
Iron, as Ferrous (Fe+2)	--	mg/L	--	--
Methane	--	µg/L	--	--
Nitrate as N	--	mg/L	--	--
Oxygen	--	mg/L	--	--
Sulfate	--	mg/L	--	--
VOCs				
Acetone	4,000	µg/L	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0
Methylene chloride	5	µg/L	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0
Trichloroethene	5	µg/L	< 5.0	< 5.0
Xylenes	10,000	µg/L	**6.8**	**6.3**
SVOCs				
Acenaphthene	2,000	µg/L	**18**	**21**
Acenaphthylene	10	µg/L	< 1.0	< 1.0
Anthracene	10	µg/L	**0.25**	**0.25**
Benzo(a)anthracene	0.1	µg/L	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050
Chrysene	0.2	µg/L	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	**0.12**	**0.13**
Fluorene	1,000	µg/L	**2.0**	**2.2**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050
Naphthalene	20	µg/L	**240**	**300**
Phenanthrene	10	µg/L	**0.95**	**1.1**
Pyrene	1,000	µg/L	**0.11**	**0.12**
Inorganics				
Antimony	0.006	mg/L	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500
Barium	2	mg/L	**0.735**	**0.741**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100
Copper	1.3	mg/L	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100
Mercury	0.002	mg/L	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	< 0.0100	< 0.0100
Zinc	2	mg/L	< 0.0200	< 0.0200

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-6
Groundwater Analytical Results for Bedrock Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

Location ID			MW-213	MW-306BR	MW-307BR	MW-307BR	MW-308BR	MW-308BR	MW-309BR	MW-310BR	MW-313	MW-315	MW-315	MW-318	MW-319	MW-320	MW-321	MW-324	MW-325	MW-500BR	MW-503BR	MW-504BR	MW-506BR	MW-507BR	MW-508BR	MW-509BR	MW-510BR	MW-511BR	MW-512BR	MW-513BR
Sample Date			1/13/2015	1/14/2015	1/15/2015	1/15/2015	1/29/2015	1/29/2015	1/29/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/14/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/15/2015	1/14/2015	1/15/2015	1/15/2015	1/15/2015	1/15/2015	1/14/2015	1/14/2015	1/14/2015	1/14/2015
Sample Type			N	N	DUP-4	N	N	DUP-05	N	N	N	N	DUP-02	N	N	N	N	N	N	N	N	N	Destroyed	N	N	N	N	N	N	N
Field Parameters	**Type 1 RRS**	**Units**																												
Specific Conductivity	--	mS/cm	0.650	0.495	--	--	--	--	0.167	0.248	0.173	0.616	0.616	0.710	0.408	0.114	0.146	0.061	0.093	0.213	0.074	0.160	--	0.230	2.10	0.205	0.203	0.274	0.632	0.650
Dissolved Oxygen	--	mg/L	0.33	0.50	--	--	--	--	0.47	1.16	0.74	0.61	0.61	0.53	0.52	5.35	1.94	0.55	0.65	0.69	0.39	0.43	--	2.24	1.93	0.49	0.43	0.68	0.57	0.75
Oxidation-Reduction Potential	--	mV	-80.2	-131.3	--	--	--	--	-113.5	-34.9	-39.2	-74.7	-74.7	-86.5	-126.6	-37.8	-37.6	-36.3	-89.1	-21.6	-31.9	-60.6	--	-114.7	-228.6	-124.0	-135.7	-109.8	-101.9	-14.1
pH	--	pH units	6.14	7.12	--	--	--	--	5.97	7.13	8.69	6.51	6.51	8.33	6.99	9.14	9.66	6.56	8.96	10.24	5.95	9.49	--	8.98	12.05	9.48	6.72	10.35	7.08	6.03
Temperature	--	deg C	15.2	15.4	--	--	--	--	17.8	16.7	13.9	18.6	18.6	14.9	17.4	10.5	15.3	17.2	15.5	11.7	15.3	13.1	--	15.2	11.2	12.8	11.7	11.3	15.5	13.7
Turbidity	--	NTU	3.31	3.42	--	--	--	--	2.92	9.42	10.4	1.06	1.06	1.02	4.11	0.44	1.05	0.91	1.54	1.82	2.27	4.63	--	3.06	1.86	3.99	4.82	20.6	2.01	8.89
MNA																														
Carbon dioxide	--	mg/L	--	--	--	--	--	--	47.3	--	73.8	77.9	69.2	172	174	--	--	--	--	--	< 10.0	--	--	56.6	< 10.0	47.1	--	--	269	--
Iron, as Ferrous (Fe+2)	--	mg/L	--	--	--	--	--	--	0.119	--	< 0.100	6.36	6.53	0.995	0.364	--	--	--	--	--	< 0.500	--	--	< 0.100	< 0.100	< 0.100	--	--	< 0.100	--
Methane	--	µg/L	--	--	--	--	--	--	120	--	240	60	57	2,800	< 4	--	--	--	--	--	8	--	--	< 4	500	980	--	--	4,900	--
Nitrate as N	--	mg/L	--	--	--	--	--	--	< 0.25	--	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	--	--	--	--	--	< 0.25	--	--	0.61	< 0.25	< 0.25	--	--	< 0.25	--
Oxygen	--	mg/L	--	--	--	--	--	--	8.46	--	7.42	7.68 H	7.01	7.29	8.5	--	--	--	--	--	7.73	--	--	8.16	8.17	8.68	--	--	8.00	--
Sulfate	--	mg/L	--	--	--	--	--	--	< 1.0	--	1.1	5.5	4.9	< 1.0	22	--	--	--	--	--	6.7	--	--	38	4.5	4.6	--	--	22	--
VOCs																														
Acetone	4,000	µg/L	< 50	< 50	< 5,000	< 5,000	< 2500	< 2500	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 5,000	< 50	< 50	--	< 50	< 50	< 50	< 50	< 50	< 50	< 50
Benzene	5	µg/L	**8,900**	< 5.0	**12,000**	**12,000**	**6,600**	**6,100**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1,400**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13,000**	**35**	< 5.0	--	< 5.0	< 5.0	**2,500**	**1,100**	**450**	< 5.0	< 5.0
Carbon disulfide	4,000	µg/L	< 5.0	< 5.0	< 500	< 500	< 250	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	**1,500**	< 5.0	**2,100**	**2,000**	**810**	**720**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1,200**	< 5.0	< 5.0	--	< 5.0	< 5.0	**260**	**180**	**17**	< 5.0	< 5.0
Methylene chloride	5	µg/L	< 5.0	< 5.0	< 500	< 500	< 250	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	**460**	< 5.0	< 500	< 500	**2,100**	**1,900**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	**12**	< 5.0	--	< 5.0	< 5.0	**460**	**190**	**35**	< 5.0	< 5.0
Trichloroethene	5	µg/L	< 5.0	< 5.0	< 500	< 500	< 250	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes	10,000	µg/L	**1,300**	< 5.0	**770**	**720**	**880**	**740**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**610**	< 5.0	< 5.0	--	< 5.0	< 5.0	**160**	**200**	**12**	< 5.0	< 5.0
SVOCs																														
Acenaphthene	2,000	µg/L	**180**	**5.3**	**220**	**220**	**46**	**46**	< 0.50	< 0.50	< 0.50	**0.56**	**0.65**	**37**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	**86**	< 0.50	< 0.50	--	< 0.50	< 0.50	**16**	**7.8**	**3.3**	**2.5**	**1.3**
Acenaphthylene	10	µg/L	**180**	< 1.0	< 1.0	< 1.0	**66**	**63**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.2**	< 1.0	< 1.0	--	< 1.0	< 1.0	**8.0**	**2.7**	< 1.0	< 1.0	< 1.0
Anthracene	10	µg/L	**7.9**	**0.062**	**6.6**	**7.2**	**7.0**	**7.5**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.81**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**1.6**	< 0.050	< 0.050	--	< 0.050	< 0.050	**0.91**	**0.86**	**0.081**	**0.051**	**0.082**
Benzo(a)anthracene	0.1	µg/L	< 0.50	< 0.050	**0.15**	**0.20**	**9.6**	**9.9**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**0.17**	< 0.050	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**11**	**11**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**0.13**	< 0.050	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**10**	**10**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	**0.13**	< 0.10	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**5.9**	**6.2**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**3.3**	**3.2**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Chrysene	0.2	µg/L	< 0.050	< 0.050	**0.11**	**0.13**	**7.8**	**8.3**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	< 0.050	< 0.050	< 0.050	**0.14**	< 0.050	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**1.1**	**1.2**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	**1.3**	< 0.10	**3.1**	**3.5**	**12**	**12**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**0.51**	< 0.10	< 0.10	--	< 0.10	< 0.10	**0.45**	**0.78**	< 0.10	< 0.10	< 0.10
Fluorene	1,000	µg/L	**51**	**0.59**	**46**	**48**	**22**	**21**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**4.6**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**14**	< 0.10	< 0.10	--	< 0.10	< 0.10	**6.5**	**4.7**	**0.89**	**0.28**	< 0.10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**4.8**	**4.9**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	**0.072**	**0.067**	< 0.050	**0.058**	< 0.050	**0.081**	< 0.050
Naphthalene	20	µg/L	**14,000**	< 0.50	**8,100**	**6,700**	**3,400**	**3,200**	< 0.50	**7.6**	< 0.50	< 0.50	< 0.50	**920**	< 0.50	**13**	**5.7**	**5.3**	< 0.50	**2,800**	< 0.50	**0.65**	--	< 0.50	< 0.50	**810**	**300**	**150**	< 0.50	< 0.50
Phenanthrene	10	µg/L	**52**	< 0.050	**44**	**46**	**28**	**29**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**4.5**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**12**	< 0.050	**0.088**	--	< 0.050	< 0.050	**7.9**	**5.6**	**0.76**	< 0.050	< 0.050
Pyrene	1,000	µg/L	**1.3**	< 0.050	**3.6**	**4.1**	**17**	**19**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.59**	< 0.050	< 0.050	--	< 0.050	< 0.050	**0.52**	**0.97**	**0.055**	< 0.050	< 0.050
Inorganics																														
Antimony	0.006	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	--	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Barium	2	mg/L	**0.927**	**0.535**	**0.826**	**0.804**	**1.11**	**1.15**	**0.143**	**0.142**	**0.141**	**0.455**	**0.459**	**0.551**	**0.642**	**0.0287**	**0.0606**	**0.0232**	**0.0553**	**0.364**	< 0.0200	**0.184**	--	**0.0698**	**0.614**	**0.128**	**0.109**	**0.0678**	**0.154**	**0.711**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	**0.0090**	< 0.0050	< 0.0050	< 0.0050	--	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	**0.0137**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.0348**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Cyanide	0.2	mg/L	**0.014**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.021**	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	--	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	--	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Vanadium	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.0802**	**0.0746**	**0.0472**	**0.0508**	< 0.0200	< 0.0200	**0.0564**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0205**	**0.0573**	**0.0686**	**0.0378**	**0.121**	--	< 0.0200	< 0.0200	**0.109**	**0.0939**	< 0.0200	< 0.0200	**0.0224**

Notes:
N = Normal sample
DUP = Duplicate sample
RRS = Risk Reduction Standard
BOLD=exceeds laboratory detection limit
Analyte concentration exceeds the Type 1 RRS
Detection limit exceeds the Type 1 RRS
H = Sample was prepped or analyzed beyond hold time
-- = Not Analyzed

Table 3-7
Detections and RRS Exceedances in the Alluvium Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	4	0	--	0	--
Arsenic	0.05	4	1	0.222	1	MW-408S
Barium	2	4	4	0.0777 - 0.444	0	--
Beryllium	0.004	4	0	--	0	--
Cadmium	0.005	4	1	0.0153	1	MW-501S
Chromium	0.1	4	0	--	0	--
Copper	1.3	4	0	--	0	--
Cyanide	0.2	4	0	--	0	--
Lead	0.015	4	0	--	0	--
Mercury	0.002	4	0	--	0	--
Nickel	0.1	4	0	--	0	--
Selenium	0.05	4	0	--	0	--
Thallium	0.002	4	0	--	0	--
Vanadium	0.2	4	0	--	0	--
Zinc	2	4	0	--	0	--
Semi Volatile Organic Compounds (µg/L)						
Acenaphthene	2000	4	0	--	0	--
Acenaphthylene	10	4	0	--	0	--
Anthracene	10	4	0	--	0	--
Benzo(a)anthracene	0.1	4	0	--	0	--
Benzo(a)pyrene	0.2	4	0	--	0	--
Benzo(b)fluoranthene	0.2	4	0	--	0	--
Benzo(g,h,i)perylene	10	4	0	--	0	--
Benzo(k)fluoranthene	10	4	0	--	0	--
Chrysene	0.2	4	0	--	0	--
Dibenzo(a,h)anthracene	0.3	4	0	--	0	--
Fluoranthene	1000	4	1	0.26	0	--
Fluorene	1000	4	1	0.40	0	--
Indeno(1,2,3-cd)pyrene	0.4	4	0	--	0	--
Naphthalene	20	4	1	5.0	0	
Phenanthrene	10	4	0	--	0	--
Pyrene	1000	4	2	0.064 - 0.096	0	--
Volatile Organic Compounds (µg/L)						
Acetone	4000	4	0	--	0	--
Benzene	5	4	1	35	1	MW-501S
Carbon Disulfide	4000	4	0	--	0	--
Ethylbenzene	700	4	1	5.3	0	--
Methylene Chloride	5	4	0	--	0	--
Toluene	1000	4	1	7.4	0	--
Trichloroethylene	5	4	0	--	0	--
Xylenes, total	10000	4	0	--	0	--

Created by: JM

Checked by: NGV

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 3-8
Detections and RRS Exceedances in the Galliard Formation Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	20	0	--	0	--
Arsenic	0.05	20	1	0.429	1	MW-408DR
Barium	2	20	20	0.0300 - 0.491	0	--
Beryllium	0.004	20	0	--	0	--
Cadmium	0.005	20	1	0.0358	1	MW-401D
Chromium	0.1	20	0	--	0	--
Copper	1.3	20	2	0.0221 - 0.0312	0	--
Cyanide	0.2	20	3	0.012 - 0.022	0	--
Lead	0.015	20	0	--	0	--
Mercury	0.002	20	0	--	0	--
Nickel	0.1	20	1	0.0275	0	--
Selenium	0.05	20	1	0.0687	1	MW-207
Thallium	0.002	20	0	--	0	--
Vanadium	0.2	20	1	0.0607	0	--
Zinc	2	20	7	0.0202 - 0.208	0	--
Semi Volatile Organic Compounds (µg/L)						
Acenaphthene	2000	20	5	1.6 - 73	0	--
Acenaphthylene	10	20	3	1.7 - 120	2	MW-600, -601
Anthracene	10	20	8	0.051 - 4.4	0	--
Benzo(a)anthracene	0.1	20	1	0.38	1	MW-600
Benzo(a)pyrene	0.2	20	3	0.051 - 0.3	1	MW-600
Benzo(b)fluoranthene	0.2	20	1	0.28	1	MW-600
Benzo(g,h,i)perylene	10	20	3	0.11 - 0.16	0	--
Benzo(k)fluoranthene	10	20	2	0.068 - 0.085	0	--
Chrysene	0.2	20	1	0.30	1	MW-600
Dibenzo(a,h)anthracene	0.3	20	2	0.11 - 0.13	0	--
Fluoranthene	1000	20	5	0.11 - 1.2	0	--
Fluorene	1000	20	5	0.22 - 36	0	--
Indeno(1,2,3-cd)pyrene	0.4	20	4	0.064 - 0.13	0	--
Naphthalene	20	20	10	1.8 - 6,500	4	MW-12, -304, -600, -601
Phenanthrene	10	20	4	3.2 - 17	3	MW-12, -600, -601
Pyrene	1000	20	6	0.079 - 1.8	0	--
Volatile Organic Compounds (µg/L)						
Acetone	4000	20	0	--	0	--
Benzene	5	20	4	27 - 25,000	4	MW-12, -304, -600, -601
Carbon Disulfide	4000	20	0	--	0	--
Ethylbenzene	700	20	3	13 - 990	2	MW-12, -601
Methylene Chloride	5	20	0	--	0	--
Toluene	1000	20	3	720 - 8,500	2	MW-600, -601
Trichloroethylene	5	20	2	18	2	MW-21, -401D
Xylenes, total	10000	20	5	6.8 - 2,600	0	--

Created by: JM

Checked by: TEN

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

DNAPL was observed in MW-205 and MW-502D; therefore, they were not sampled

Table 3-9
Detections and RRS Exceedances in the Saprolite Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	6	0	--	0	--
Arsenic	0.05	6	0	--	0	--
Barium	2	6	6	0.0566 - 0.648	0	--
Beryllium	0.004	6	0	--	0	--
Cadmium	0.005	6	0	--	0	--
Chromium	0.1	6	1	0.0117	0	--
Copper	1.3	6	0	--	0	--
Cyanide	0.2	6	1	0.010	0	--
Lead	0.015	6	0	--	0	--
Mercury	0.002	6	1	0.00036	0	--
Nickel	0.1	6	2	0.151 - 0.336	2	MW-306SAP and MW-310SAP
Selenium	0.05	6	0	--	0	--
Thallium	0.002	6	0	--	0	--
Vanadium	0.2	6	0	--	0	--
Zinc	2	6	0	--	0	--
Semi Volatile Organic Compounds (ug/L)						
Acenaphthene	2000	6	1	13	0	--
Acenaphthylene	10	6	1	3.2	0	--
Anthracene	10	6	1	0.56	0	--
Benzo(a)anthracene	0.1	6	0	--	0	--
Benzo(a)pyrene	0.2	6	0	--	0	--
Benzo(b)fluoranthene	0.2	6	0	--	0	--
Benzo(g,h,i)perylene	10	6	0	--	0	--
Benzo(k)fluoranthene	10	6	0	--	0	--
Chrysene	0.2	6	0	--	0	--
Dibenzo(a,h)anthracene	0.3	6	0	--	0	--
Fluoranthene	1000	6	0	--	0	--
Fluorene	1000	6	1	5.5	0	--
Indeno(1,2,3-cd)pyrene	0.4	6	0	--	0	--
Naphthalene	20	6	2	0.66 - 560	1	MW-311
Phenanthrene	10	6	1	3.3	0	--
Pyrene	1000	6	0	--	0	--
Volatile Organic Compounds (ug/L)						
Acetone	4000	6	0	--	0	--
Benzene	5	6	1	370	1	MW-311
Carbon Disulfide	4000	6	0	--	0	--
Ethylbenzene	700	6	1	94	0	--
Methylene Chloride	5	6	0	--	0	--
Toluene	1000	6	1	9.6	0	--
Trichloroethylene	5	6	1	20	1	MW-401SAP
Xylenes, total	10000	6	1	41	0	--

Created by: JM

Checked by: TEN

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 3-10
Detections and RRS Exceedances in the Transition Zone Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	1	0	--	0	--
Arsenic	0.05	1	0	--	0	--
Barium	2	1	1	0.741	0	--
Beryllium	0.004	1	0	--	0	--
Cadmium	0.005	1	0	--	0	--
Chromium	0.1	1	0	--	0	--
Copper	1.3	1	0	--	0	--
Cyanide	0.2	1	0	--	0	--
Lead	0.015	1	0	--	0	--
Mercury	0.002	1	0	--	0	--
Nickel	0.1	1	0	--	0	--
Selenium	0.05	1	0	--	0	--
Vanadium	0.2	1	0	--	0	--
Zinc	2	1	0	--	0	--
Thallium	0.002	1	0	--	0	--
Semi Volatile Organic Compounds (ug/L)						
Acenaphthene	2000	1	1	21	0	--
Acenaphthylene	10	1	0	--	0	--
Anthracene	10	1	1	0.25	0	--
Benzo(a)anthracene	0.1	1	0	--	0	--
Benzo(a)pyrene	0.2	1	0	--	0	--
Benzo(b)fluoranthene	0.2	1	0	--	0	--
Benzo(g,h,i)perylene	10	1	0	--	0	--
Benzo(k)fluoranthene	10	1	0	--	0	--
Chrysene	0.2	1	0	--	0	--
Dibenzo(a,h)anthracene	0.3	1	0	--	0	--
Fluoranthene	1000	1	1	0.13	0	--
Fluorene	1000	1	1	2.2	0	--
Indeno(1,2,3-cd)pyrene	0.4	1	0	--	0	--
Naphthalene	20	1	1	300	1	MW-306TZ
Phenanthrene	10	1	1	1.1	0	--
Pyrene	1000	1	1	0.12	0	--
Volatile Organic Compounds (ug/L)						
Acetone	4000	1	0	--	0	--
Benzene	5	1	0	--	0	--
Carbon Disulfide	4000	1	0	--	0	--
Ethylbenzene	700	1	0	--	0	--
Methylene Chloride	5	1	0	--	0	--
Toluene	1000	1	0	--	0	--
Trichloroethylene	5	1	0	--	0	--
Xylenes, total	10000	1	1	6.3	0	--

Created by: JM

Checked by: NGV

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 3-11
Detections and RRS Exceedances in the Bedrock Wells
January 2015 Montoring Event
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Type 1 RRS	Number of Wells Sampled	Number of Detections	Range of Detected Concentrations	Number of Wells > Type1 RRS	Wells with Type 1 RRS Exceedances
Inorganics (mg/L)						
Antimony	0.006	24	0	--	0	--
Arsenic	0.05	24	0	--	0	--
Barium	2	24	24	0.0232 - 1.15	0	--
Beryllium	0.004	24	0	--	0	--
Cadmium	0.005	24	1	0.0090	1	MW-325
Chromium	0.1	24	1	0.0137	0	--
Copper	1.3	24	2	0.0214 - 0.0348	0	--
Cyanide	0.2	24	2	0.014 - 0.021	0	--
Lead	0.015	24	0	--	0	--
Mercury	0.002	24	0	--	0	--
Nickel	0.1	24	0	--	0	--
Selenium	0.05	24	0	--	0	--
Thallium	0.002	24	0	--	0	--
Vanadium	0.2	24	0	--	0	--
Zinc	2	24	11	0.0205 - 0.121	0	--
Semi Volatile Organic Compounds (ug/L)						
Acenaphthene	2000	24	12	0.56 - 220	0	--
Acenaphthylene	10	24	5	1.2 - 180	2	MW-213 and MW-308BR
Anthracene	10	24	11	0.051 - 7.9	0	--
Benzo(a)anthracene	0.1	24	3	0.15 - 9.9	3	MW-307BR, -308BR, -510BR
Benzo(a)pyrene	0.2	24	2	0.13 - 11	1	MW-308BR
Benzo(b)fluoranthene	0.2	24	2	0.13 - 10	1	MW-308BR
Benzo(g,h,i)perylene	10	24	1	6.2	0	--
Benzo(k)fluoranthene	10	24	1	3.3	0	--
Chrysene	0.2	24	3	0.11 - 8.3	1	MW-308BR
Dibenzo(a,h)anthracene	0.3	24	1	1.2	1	MW-308BR
Fluoranthene	1000	24	7	0.45 - 12	0	--
Fluorene	1000	24	10	0.28 - 51	0	--
Indeno(1,2,3-cd)pyrene	0.4	24	5	0.058 - 4.9	1	MW-308BR
Naphthalene	20	24	13	0.65 - 14,000	8	MW-213, -307BR, -308BR, -318, -500BR, -509BR, 510BR, -511BR
Phenanthrene	10	24	9	0.088 - 52	4	MW-213, -307BR, -308BR, 500BR
Pyrene	1000	24	7	0.055 - 19	0	--
Volatile Organic Compounds (ug/L)						
Acetone	4000	24	0	--	0	--
Benzene	5	24	9	35 - 13,000	9	MW-213, -307BR, -308BR, -318, -500BR, -503BR, -509BR, -510BR, -511BR.
Carbon Disulfide	4000	24	0	--	0	--
Ethylbenzene	700	24	7	17 - 2,100	4	MW-213, -307BR, -308BR, 500BR
Methylene Chloride	5	24	0	--	0	--
Toluene	1000	24	6	12 - 2,100	1	MW-308BR
Trichloroethylene	5	24	0	--	0	--
Xylenes, total	10000	24	8	12 - 1,300	0	--

Created by: JM

Checked by: TEN

Notes:

ND - None Detected

µg/L - micrograms per liter

mg/L - milligrams per liter

RRS - Risk Reduction Standard

Table 5-1
Treatment System Effluent Sample Results
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Parameter	Sample ID Sample Date Unit	Effluent Concentration Limit (ug/L)	Effluent 9/3/2014	Effluent 10/10/2014	Effluent 11/4/2014	Effluent 12/9/2014	Effluent 2/5/2015	Effluent 3/6/2015	Effluent 4/3/2015
Volatile Organic Compounds									
Benzene	µg/L	5530	64	< 5.0	< 5.0	46	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/L	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/L	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes, total	µg/L	NE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Semivolatile Organic Compounds									
Bis(2-ethylhexyl)phthalate	µg/L	--	--	**--**	< 10	**--**	**--**	< 10	--
Inorganic Compound Results									
Antimony	µg/L	NE	< 60	< 60	< 60	< 60	< 60	< 60	< 60
Barium	µg/L	NE	643	306	603	669	80.5	811	755
Chromium	µg/L	1740	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chromium (hexavalent compounds)	mg/L	1740	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Copper	µg/L	380	< 25	< 25	< 25	< 25	< 25	< 25	< 25
Nickel	µg/L	400	< 20	< 20	< 20	< 20	< 20	< 20	< 20
pH	SU	6-11*	6.74	8.60	6.66	7.05	9.46	7.23	7.07

Created by: GEJ
Checked by: NGV

Notes:
mg/L - milligram per liter
µg/L - microgram per liter
SU - standard unit
NE - not established

Table 5-2
Extraction Wells Operational Data
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Date	Extraction Well	Reason For Shutdown
September 22, 2014 - October 10, 2014	MW-307BR / MW-308BR	Carbon replacement
December 29, 2014 - January 30, 2015	MW-307BR / MW-308BR	Carbon replacement
January 30, 2015 - Present	MW-308BR	Pump not operational

Table 5-3
Mass Reduction Calculations in Bedrock Groundwater
September 1, 2014 - April 1, 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Extraction Well	Total Volume Extracted (gallons)	Total Volume Extracted (Liters)	Benzene Concentration (µg/L)	Benzene Mass (µg)	Total Benzene Mass Removed 9/1/14 - 4/1/15 (Kg)	Total Benzene Mass Removed from Previous Monitoring Periods (Kg)	Total Benzene Mass Removed from System to Date (Kg)
Benzene							
MW-307BR	630,506	2,386,465	12,000	28,637,582,520	28.64	480.86	509.50
MW-308BR	815,246	3,085,706	6,600	20,365,660,326	20.37	225.41	245.78
	1,445,752	**5,472,171**	--	**49,003,242,846**	**49.00**	**706.27**	**755.27**

Extraction Well	Total Volume Extracted (gallons)	Total Volume Extracted (Liters)	Naphthalene Concentration (µg/L)	Naphthalene Mass (µg)	Total Naphthalene Mass Removed 9/1/14 - 4/1/15 (Kg)	Total Naphthalene Mass Removed from Previous Monitoring Periods (Kg)	Total Naphthalene Mass Removed from System to Date (Kg)
Naphthalene							
MW-307BR	630,506	2,386,465	8,100	19,330,368,201	19.33	260.82	280.15
MW-308BR	815,246	3,085,706	3,400	10,491,400,774	10.49	175.45	185.94
	1,445,752	**5,472,171**	--	**29,821,768,975**	**29.82**	**436.27**	**466.09**

Notes:
Kg - kilogram
µg/L - micrograms per liter

Figures

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

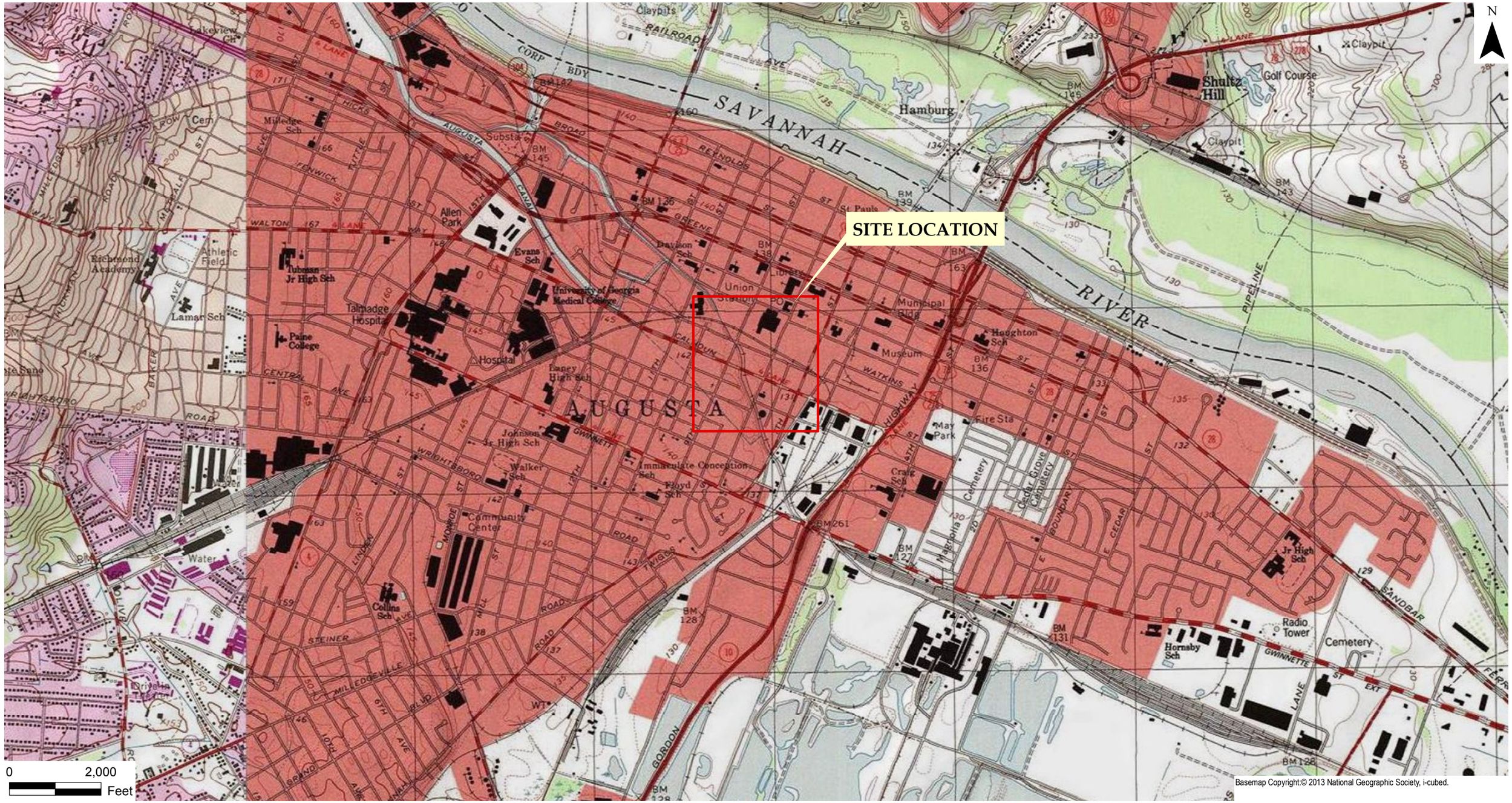

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FIGURE 1-1
SITE LOCATION MAP

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

CONTOUR INTERVAL 10 FEET

DOTTED LINES REPRESENT
5-FOOT CONTOURS

NATIONAL GEODETIC VERTICAL
DATUM OF 1929

QUADRANGLE LOCATION

ERM

N

MW-319
MW-408S
MW-408D
TELFAIR ST
WALKER ST
MW-320
MW-318
MW-317
MW-315
9TH ST
MW-603
FENWICK ST
MW-513BR
MW-325
8TH ST
MW-501S
MW-404DR
MW-306BR
MW-306 (S,D,SAP,TZ)
MW-502D
MW-512BR
MW-600
MW-511BR
WALTON WAY
MW-323
MW-324
MW-307 (D,SAP,TZ)
MW-321
MW-316
MW-307BR
MW-322
MW-24
MW-21
7TH ST
MW-503BR
MW-504BR
MW-310 (D,SAP,TZ)
MW-402S
MW-310BR
MW-402D
NORTHERN PARCEL
MW-510BR
MW-211
MW-202DR
MW-601
MW-313
MW-509BR
KING ST
MW-19
MW-205
MW-203
MW-308BR
WESTERN PARCEL
MW-213
MW-17
MW-214
MW-401S
MW-22
MW-401D
MW-401SAP
TAYLOR ST
MW-311
MW-500BR
MW-12
MW-25
SOUTHERN PARCEL
MW-206
MW-508BR
MW-207
MW-506BR
MW-05
MW-309 (D,SAP,TZ)
MW-309BR
MW-505D
MW-304
MW-303
MW-507BR
MW-602

0 200 Feet

- Alluvium Monitoring Well
- Galliard Monitoring Well
- Saprolite Monitoring Well
- Bedrock Monitoring Well
- Bedrock Recovery Well
- Destroyed Alluvium Monitoring Well
- Destroyed Bedrock Monitoring Well
- Depth Discrete Sampling Port
- Parcels
- ISS (*In-Situ* Solidification) Area
- ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
Depth discrete sampling port may contain up to four tubes within its well casing that are screened at different depth intervals (Alluvium = S, Galliard = D, Saprolite = SAP and Transition = TZ)

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

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FIGURE 2-1
GROUNDWATER MONITORING WELL NETWORK

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408S
(124.96)

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

WALTON WAY

MW-501S
(125.60)

MW-306S
(124.58)

MW-402S
(123.27)

MW-17
(127.22)

MW-401S
(126.70)

MW-05

126

125

124

127

NORTHERN
PARCEL

WESTERN
PARCEL

0 200 Feet

(127.22) Groundwater Elevation (Feet MSL)

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Parcels

ISS (In Situ Solidification)

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

*MW-408S was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

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FIGURE 3-1
GROUNDWATER ELEVATION MAP FOR THE ALLUVIUM
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408DR* (124.67)

TELFAIR ST

WALKER ST

9TH ST

MW-603 (124.30)

FENWICK ST

8TH ST

MW-404DR (125.60)

WALTON WAY

MW-502D (124.19)

MW-306D (124.18)

MW-600 (125.21)

MW-307D (124.67)

MW-24 (123.74)

7TH ST

MW-21 (121.66)

MW-310D (124.39)

MW-402D (124.23)

NORTHERN PARCEL

MW-211 (NM)

MW-202DR (124.07)

MW-601 (124.00)

KING ST

MW-19 (127.71)

WESTERN PARCEL

MW-205 (124.02)

MW-203 (123.95)

MW-22 (123.92)

MW-401D (124.20)

TAYLOR ST

MW-12 (123.88)

MW-25 (123.77)

SOUTHERN PARCEL

MW-206 (123.94)

MW-207 (126.65)

MW-309D (123.51)

MW-505D (123.68)

MW-304 (123.08)

MW-303 (123.23)

MW-602 (122.70)

125 126 127 124 123 122

0 200 Feet

(123.10) Groundwater Elevation (Feet MSL)

(NM) Not Measured

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Galliard Monitoring Well

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

*MW-408DR was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

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FIGURE 3-2
GROUNDWATER ELEVATION MAP FOR THE GALLIARD JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

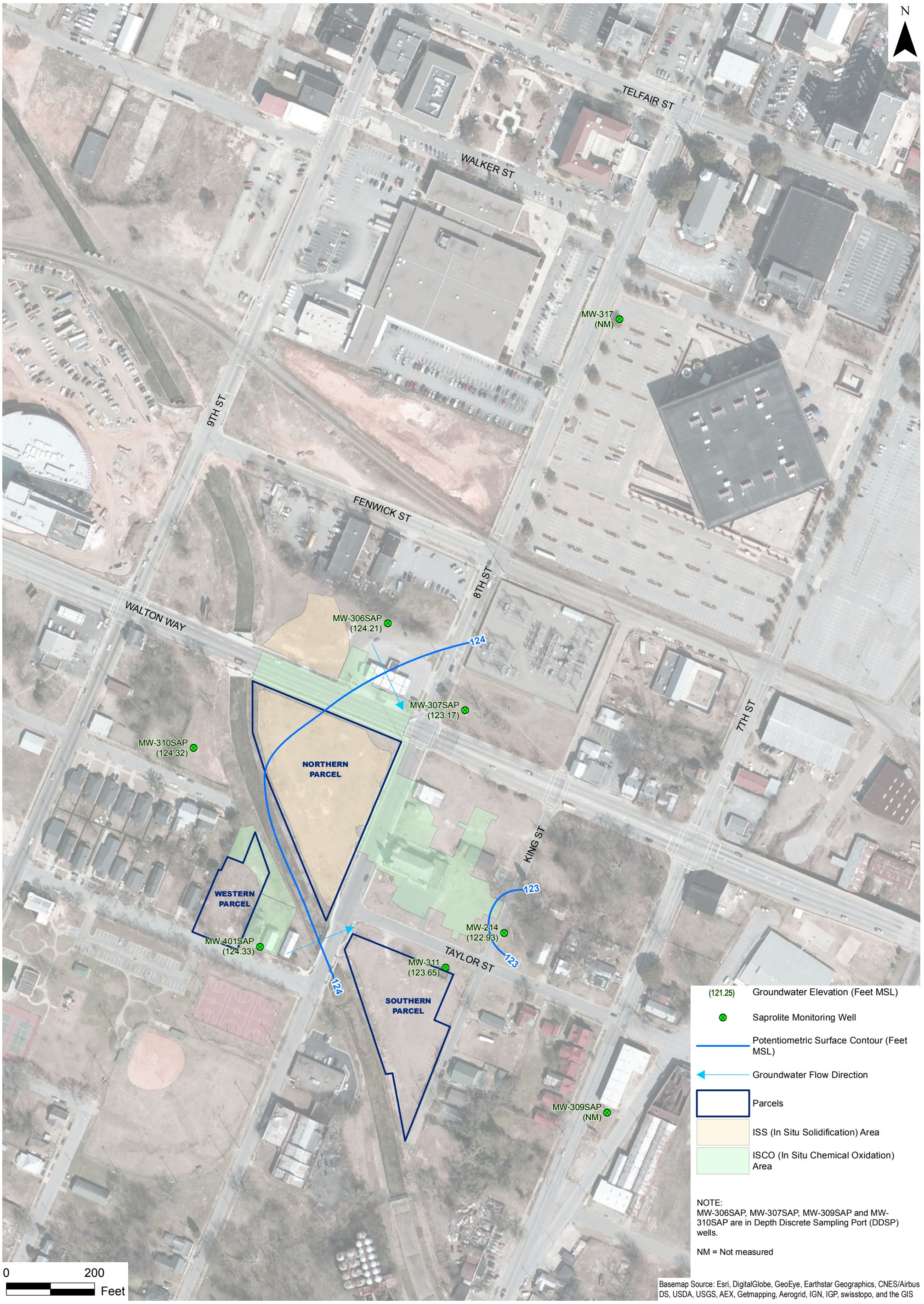

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FIGURE 3-3
GROUNDWATER ELEVATION MAP FOR THE SAPROLITE
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-319 (124.08)

124

TELFAIR ST

WALKER ST

MW-320 (123.24)

123

MW-318 (123.28)

124

MW-315 (123.97)

9TH ST

122

MW-513BR (123.54)

MW-325 (121.29)

FENWICK ST

8TH ST

WALTON WAY

MW-306BR (123.77)

MW-306TZ (123.84)

MW-512BR (123.86)

MW-511BR (123.84)

MW-323 (122.85)

MW-307TZ (NM)

MW-324 (123.22)

MW-503BR (123.90)

MW-321 (123.27)

MW-316 (123.31)

MW-307BR

MW-322 (123.33)

MW-504BR (123.89)

7TH ST

MW-310BR* (129.98)

MW-310TZ (NM)

NORTHERN PARCEL

MW-510BR (123.76)

MW-313 (122.49)

MW-509BR (123.78)

KING ST

WESTERN PARCEL

MW-308BR

MW-213 (123.15)

TAYLOR ST

MW-500BR (123.82)

SOUTHERN PARCEL

MW-508BR (123.31)

123

MW-506BR

MW-309TZ (NM)

MW-309BR (122.24)

122

MW-507BR (121.88)

0 200 Feet

(122.49) Groundwater Elevation (Feet MSL)

Bedrock Monitoring Well

Bedrock Recovery Well

Transition Well

Destroyed Bedrock Monitoring Well

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

NM = Not measured

Dashed where inferred

* MW-310BR is an anomalous point and was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FILE:	S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSACAER_F3-4GWBdrkTZ.mxd				

FIGURE 3-4
GROUNDWATER POTENTIAL MAP FOR THE BEDROCK AND TRANSITION WELLS - JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408S

MW-408S	RESULT
Arsenic	0.222

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

MW-501S

MW-501S	RESULT
Benzene	35
Cadmium	0.0153

MW-306S
NS

WALTON WAY

MW-402S
NE

NORTHERN PARCEL

WESTERN PARCEL

MW-17
NS

MW-401S
NE

SOUTHERN PARCEL

MW-05

Well ID	RESULT
Constituent	Concentration

NE No Type 1 RRS Exceedances

NS Not Sampled

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

Organic constituents are reported in ug/L. Inorganic constituents are reported in mg/L.

0 200 Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-5
TYPE I RRS EXCEEDANCES FOR THE ALLUVIUM WELLS JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408DR

MW-408DR	RESULT
Arsenic	0.429

TELFAIR ST

WALKER ST

9TH ST

MW-603 DNAPL

FENWICK ST

8TH ST

MW-404DR NE

WALTON WAY

MW-502D DNAPL

MW-306D NE

MW-600

MW-600	RESULT
Benzene	25,000
Toluene	8,500
Acenapthylene	120
Benzo(a)anthracene	0.38
Benzo(a)pyrene	0.30
Benzo(b)fluoranthene	0.28
Chrysene	0.30
Naphthalene	5,400
Phenanthrene	15

MW-24 NS

MW-307D NE

MW-21

MW-21	RESULT
Trichloroethylene	18

7TH ST

MW-310D NS

MW-402D NE

MW-601	RESULT
Benzene	6,900
Ethylbenzene	960
Toluene	2,100
Acenapthylene	45
Naphthalene	6,500
Phenanthrene	17

MW-211 NS

MW-202DR NE

MW-601

KING ST

MW-19 NE

WESTERN PARCEL

MW-205 DNAPL

MW-203 NE

MW-401D	RESULT
Trichloroethylene	18
Cadmium	0.0358

MW-401D

MW-22 NE

TAYLOR ST

MW-12	RESULT
Benzene	3,600
Ethylbenzene	990
Naphthalene	4,900
Phenanthrene	14

MW-12

MW-25 NS

MW-206 NE

MW-207	RESULT
Selenium	0.0687

MW-207

MW-309D NS

MW-505D NE

MW-304

MW-304	RESULT
Benzene	27
Naphthalene	27

MW-303 NE

MW-602 NE

Well ID	RESULT
Constituent	Concentration

NE — No Type 1 RRS Exceedances

NS — Not Sampled

DNAPL — Dense non-aqueous phase liquid present

Galliard Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

Organic constituents are reported in ug/L.

0 200 Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-6
TYPE I RRS EXCEEDANCES FOR THE GALLIARD FORMATION WELLS - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

WALTON WAY

7TH ST

KING ST

TAYLOR ST

MW-317
NS

MW-306SAP

MW-306SAP	RESULT
Nickel	0.151

MW-307SAP
NE

MW-310SAP

MW-310SAP	RESULT
Nickel	0.336

NORTHERN PARCEL

WESTERN PARCEL

MW-401SAP

MW-401SAP	RESULT
Trichloroethylene	20

MW-311

MW-311	RESULT
Benzene	370
Naphthalene	560

NE
MW-214

MW-309SAP
NS

Well ID	RESULT
Constituent	Concentration

NE No Type 1 RRS Exceedances

NS Not Sampled

Saprolite Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306SAP, MW-307SAP, MW-309SAP and MW-310SAP are in Depth Discrete Sampling Port (DDSP) wells.

Organic constituents are reported in ug/L. Inorganic constituents are reported in mg/L.

0 200 Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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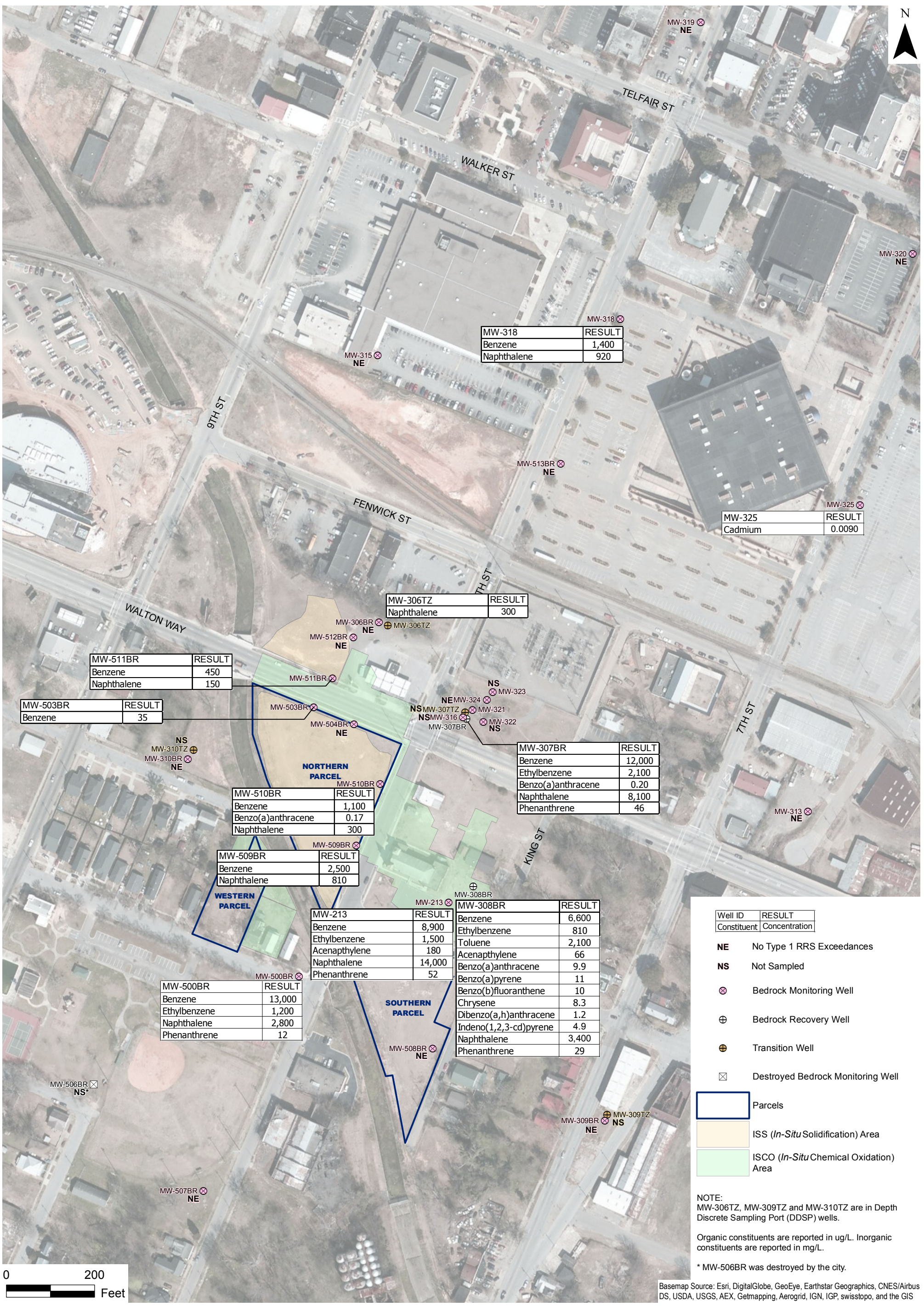
FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F3-7ExceedncsSaprolite.mxd

FIGURE 3-7
TYPE I RRS EXCEEDANCES FOR THE SAPROLITE WELLS
JANUARY 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM



MW-318	RESULT
Benzene	1,400
Naphthalene	920

MW-325	RESULT
Cadmium	0.0090

MW-306TZ	RESULT
Naphthalene	300

MW-511BR	RESULT
Benzene	450
Naphthalene	150

MW-503BR	RESULT
Benzene	35

MW-307BR	RESULT
Benzene	12,000
Ethylbenzene	2,100
Benzo(a)anthracene	0.20
Naphthalene	8,100
Phenanthrene	46

MW-510BR	RESULT
Benzene	1,100
Benzo(a)anthracene	0.17
Naphthalene	300

MW-509BR	RESULT
Benzene	2,500
Naphthalene	810

MW-213	RESULT
Benzene	8,900
Ethylbenzene	1,500
Acenapthylene	180
Naphthalene	14,000
Phenanthrene	52

MW-308BR	RESULT
Benzene	6,600
Ethylbenzene	810
Toluene	2,100
Acenapthylene	66
Benzo(a)anthracene	9.9
Benzo(a)pyrene	11
Benzo(b)fluoranthene	10
Chrysene	8.3
Dibenzo(a,h)anthracene	1.2
Indeno(1,2,3-cd)pyrene	4.9
Naphthalene	3,400
Phenanthrene	29

MW-500BR	RESULT
Benzene	13,000
Ethylbenzene	1,200
Naphthalene	2,800
Phenanthrene	12

Well ID	RESULT
Constituent	Concentration

NE No Type 1 RRS Exceedances

NS Not Sampled

Bedrock Monitoring Well

Bedrock Recovery Well

Transition Well

Destroyed Bedrock Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

Organic constituents are reported in ug/L. Inorganic constituents are reported in mg/L.

* MW-506BR was destroyed by the city.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

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FIGURE 3-8
TYPE I RRS EXCEEDANCES FOR THE BEDROCK AND TRANSITION WELLS - JANUARY 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

WALTON WAY

7TH ST

KING ST

TAYLOR ST

(<5.0)
(<0.50)
MW-408DR

20
100
1,000

5
100

DNAPL
MW-603

(<5.0)
(3.3)
MW-404DR

DNAPL
MW-502D

(<5.0)
(<0.50)
MW-306D

(25,000)
(5,400)
MW-600

10K
10K

(<5.0)
(<0.50)
MW-307D

NS
MW-24

(<5.0)
(<0.50)
MW-21

NS
MW-310D

(<5.0)
(<0.50)
MW-402D

NORTHERN PARCEL

NS
MW-211

(6,900)
(6,500)
MW-601

(<5.0)
(2.7)
MW-202DR

(<5.0)
(<0.50)
MW-19

DNAPL
MW-205

(<5.0)
(<0.50)
MW-203

WESTERN PARCEL

1,000

(<5.0)
(5.1)
MW-401D

(<5.0)
(2.8)
MW-22

(3,600)
(4,900)
MW-12

NS
MW-25

SOUTHERN PARCEL

MW-206

(<5.0)
(<0.50)
MW-207

(<5.0)
(1.8)

NS
MW-309D

(<5.0)
(4.2)
MW-505D

(27)
(27)
MW-304

(<5.0)
(<0.50)
MW-303

20
5

(<5.0)
(<0.50)
MW-602

0 200 Feet

(<5.0) Benzene Concentration (ug/L)

(<0.50) Naphthalene Concentration (ug/L)

NS Not Sampled

DNAPL Dense non-aqueous phase liquid present

Galliard Monitoring Well

Benzene Isoconcentration Contour (ug/L - Dashed where inferred)

Naphthalene Isoconcentration Contour (ug/L - Dashed where inferred)

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

DNAPL = Dense non-aqueous phase liquid

NS = Not Sampled

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-9
BENZENE AND NAPHTHALENE ISOCONCENTRATION MAP FOR THE GALLIARD FORMATION - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST
WALKER ST
9TH ST
FENWICK ST
WALTON WAY
8TH ST
7TH ST
KING ST
TAYLOR ST

MW-319 (<5.0) (<0.50)
MW-320 (<5.0) (13)
MW-318 (1,400) (920)
MW-315 (<5.0) (<0.50)
MW-513BR (<5.0) (<0.50)
MW-325 (<5.0) (<0.50)
MW-306BR (<5.0) (<0.50)
MW-306TZ (<5.0) (300)
MW-512BR (<5.0) (<0.50)
MW-511BR (450) (150)
MW-503BR (35) (<0.50)
MW-504BR (<5.0) (0.65)
MW-323 (<5.0) (5.3)
MW-324 NS
MW-307TZ NS
MW-316 NS
MW-321 (<5.0) (5.7)
MW-322 NS
MW-307BR (12,000) (8,100)
MW-310TZ NS
MW-310BR (<5.0) (<0.50)
MW-510BR (1,100) (300)
MW-509BR (2,500) (810)
MW-213 (8,900) (14,000)
MW-308BR (6,600) (3,400)
MW-500BR (13,000) (2,800)
MW-508BR (<5.0) (<0.50)
MW-506BR
MW-507BR (<5.0) (<0.50)
MW-309BR (<5.0) (<0.50)
MW-309TZ NS
MW-313 (<5.0) (<0.50)

NORTHERN PARCEL
WESTERN PARCEL
SOUTHERN PARCEL

Benzene isoconcentration contours: 5, 20, 100, 1K, 1,000, 10,000
Naphthalene isoconcentration contours: 20, 100, 1K, 10,000

0 200 Feet

(<5.0) Benzene Concentration (ug/L)
(<0.50) Naphthalene Concentration (ug/L)
NS Not Sampled
DNAPL Dense non-aqueous phase liquid present
Bedrock Monitoring Well
Bedrock Recovery Well
Transition Well
Destroyed Bedrock Monitoring Well
Benzene Isoconcentration Contour (ug/L) (Dashed where inferred)
Naphthalene Isoconcentration Contour (ug/L) (Dashed where inferred)
Parcels
ISS (*In-Situ* Solidification) Area
ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

NS = Not Sampled

* Deep bedrock well not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-10
BENZENE AND NAPHTHALENE ISOCONCENTRATION MAP FOR THE BEDROCK FORMATION AND TRANSITION WELLS - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408S
NS

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

MW-501S

MW-501S	RESULT
Carbon Dioxide	323
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	< 0.25
Oxygen	8.62
Sulfate	61

MW-306S
NS

WALTON WAY

MW-402S
NS

NORTHERN PARCEL

WESTERN PARCEL

MW-17
NS

MW-401S

MW-401S	RESULT
Carbon Dioxide	168
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	2.5
Oxygen	7.46
Sulfate	62

SOUTHERN PARCEL

MW-05

0 200 Feet

Well ID	RESULT
Constituent	Concentration

NS Not Sampled

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

Constituents are reported in mg/L, except methane. Methane is reported in ug/L.

H = Analyte was prepped or analyzed beyond specified hold time

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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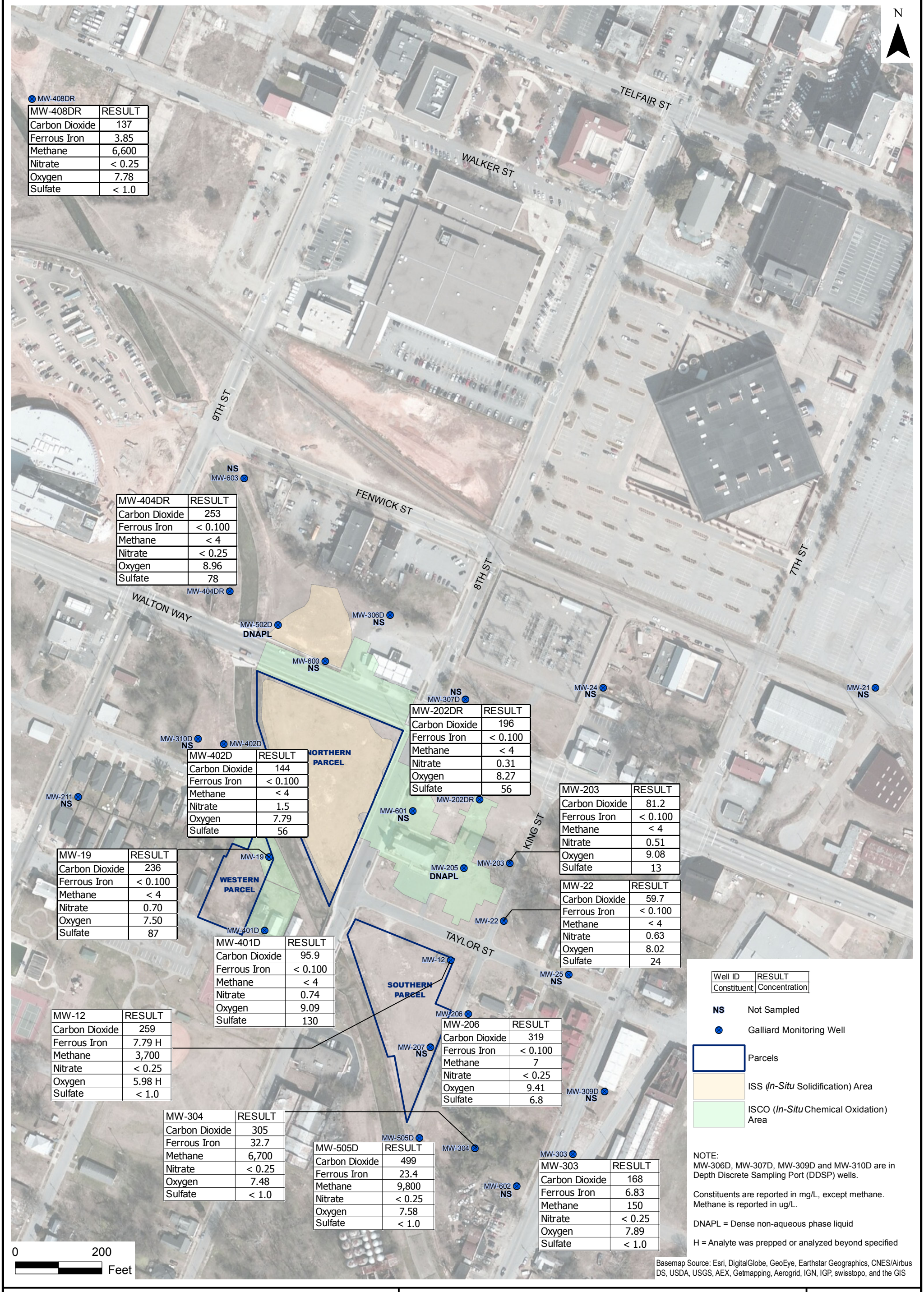
FIGURE 3-11
NATURAL ATTENUATION PARAMETERS IN ALLUVIUM GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM



MW-408DR	RESULT
Carbon Dioxide	137
Ferrous Iron	3.85
Methane	6,600
Nitrate	< 0.25
Oxygen	7.78
Sulfate	< 1.0

MW-404DR	RESULT
Carbon Dioxide	253
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	< 0.25
Oxygen	8.96
Sulfate	78

MW-202DR	RESULT
Carbon Dioxide	196
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.31
Oxygen	8.27
Sulfate	56

MW-402D	RESULT
Carbon Dioxide	144
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	1.5
Oxygen	7.79
Sulfate	56

MW-203	RESULT
Carbon Dioxide	81.2
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.51
Oxygen	9.08
Sulfate	13

MW-19	RESULT
Carbon Dioxide	236
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.70
Oxygen	7.50
Sulfate	87

MW-22	RESULT
Carbon Dioxide	59.7
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.63
Oxygen	8.02
Sulfate	24

MW-401D	RESULT
Carbon Dioxide	95.9
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	0.74
Oxygen	9.09
Sulfate	130

MW-12	RESULT
Carbon Dioxide	259
Ferrous Iron	7.79 H
Methane	3,700
Nitrate	< 0.25
Oxygen	5.98 H
Sulfate	< 1.0

MW-206	RESULT
Carbon Dioxide	319
Ferrous Iron	< 0.100
Methane	7
Nitrate	< 0.25
Oxygen	9.41
Sulfate	6.8

MW-304	RESULT
Carbon Dioxide	305
Ferrous Iron	32.7
Methane	6,700
Nitrate	< 0.25
Oxygen	7.48
Sulfate	< 1.0

MW-505D	RESULT
Carbon Dioxide	499
Ferrous Iron	23.4
Methane	9,800
Nitrate	< 0.25
Oxygen	7.58
Sulfate	< 1.0

MW-303	RESULT
Carbon Dioxide	168
Ferrous Iron	6.83
Methane	150
Nitrate	< 0.25
Oxygen	7.89
Sulfate	< 1.0

Well ID	RESULT
Constituent	Concentration

NS Not Sampled

Galliard Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

Constituents are reported in mg/L, except methane. Methane is reported in ug/L.

DNAPL = Dense non-aqueous phase liquid

H = Analyte was prepped or analyzed beyond specified

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

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FIGURE 3-12
NATURAL ATTENUATION PARAMETERS IN GALLIARD FORMATION GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

9TH ST

FENWICK ST

8TH ST

7TH ST

WALTON WAY

TAYLOR ST

MW-317
NS

MW-306SAP
NS

MW-307SAP
NS

MW-309SAP
NS

MW-310SAP

MW-310SAP	RESULT
Carbon Dioxide	61.1
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	9.8
Oxygen	7.96 H
Sulfate	24

NORTHERN PARCEL

WESTERN PARCEL

MW-214

MW-214	RESULT
Carbon Dioxide	108
Ferrous Iron	2.56
Methane	410
Nitrate	< 0.25
Oxygen	7.17 H
Sulfate	< 1.0

MW-401SAP

MW-401SAP	RESULT
Carbon Dioxide	65.5
Ferrous Iron	< 0.100
Methane	< 4
Nitrate	2.6
Oxygen	8.45 H
Sulfate	43

MW-311

MW-311	RESULT
Carbon Dioxide	329
Ferrous Iron	4.15
Methane	410
Nitrate	< 0.25
Oxygen	7.2 H
Sulfate	< 1.0

0 200 Feet

Well ID	RESULT
Constituent	Concentration

NS Not Sampled

Saprolite Monitoring Well

Parcels

ISS (*In-Situ* Solidification) Area

ISCO (*In-Situ* Chemical Oxidation) Area

NOTE:
MW-306SAP, MW-307SAP, MW-309SAP and MW-310SAP are in Depth Discrete Sampling Port (DDSP) wells.

Constituents are reported in mg/L, except methane. Methane is reported in ug/L.

H = Analyte was prepped or analyzed beyond specified

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F3-13NatAtnSaprolite.mxd

FIGURE 3-13
NATURAL ATTENUATION PARAMETERS IN SAPROLITE GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

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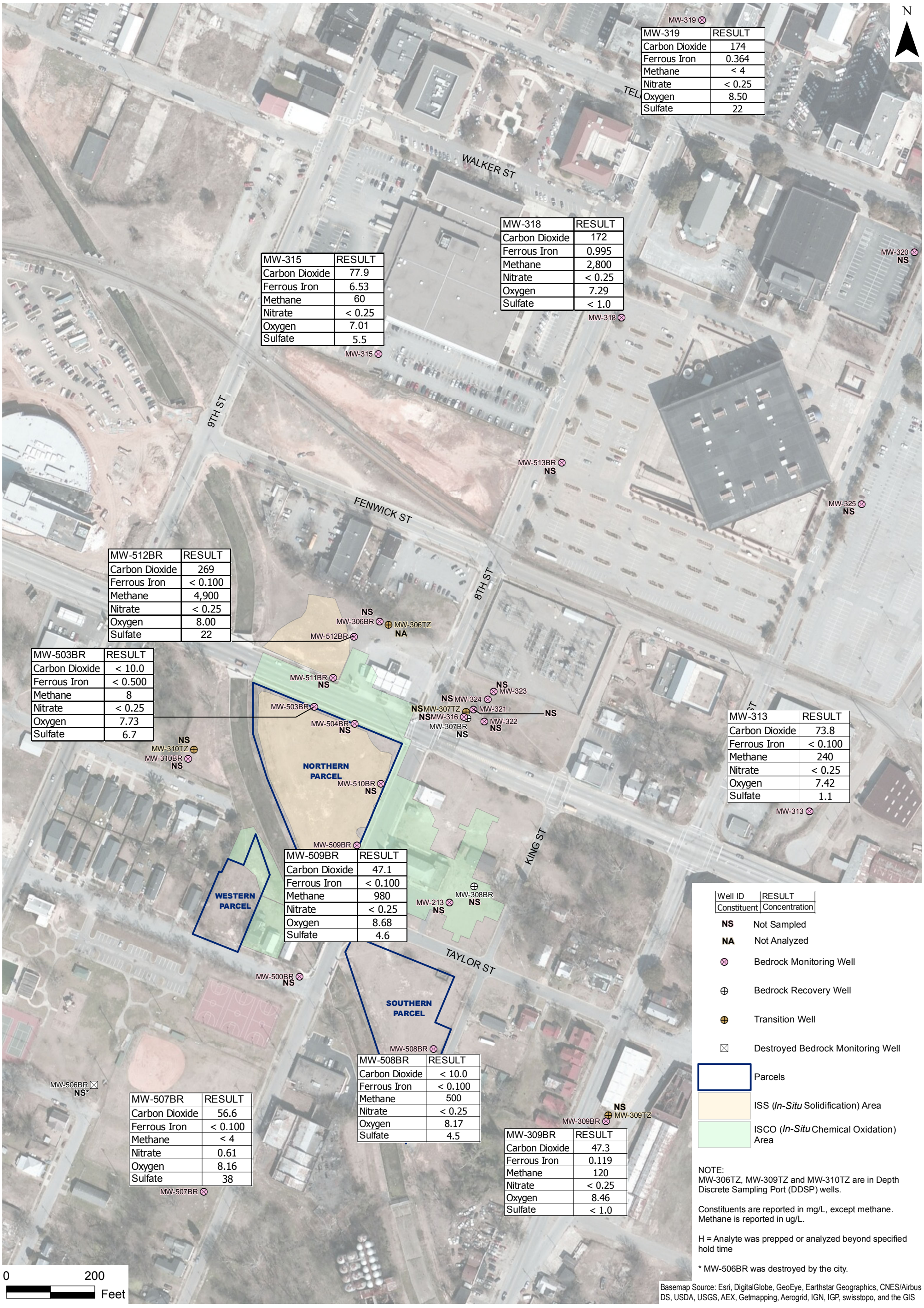

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0
FILE:	S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_F3-14NatAtnBdrkTZ.mxd				

FIGURE 3-14
NATURAL ATTENUATION PARAMETERS IN BEDROCK AND TRANSITION WELLS GROUNDWATER - JANUARY 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

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Groundwater Sampling Log Sheets

Appendix A

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

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GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta | Sampler's Name: W. Virges

Well ID: MW-12 | Pump Type/Model: Peristaltic | Sample Collection Time: 1423

Total Depth (ft)[1]: 30' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 7.48' | Pump Intake Depth (ft): ~25' | Sample ID: MW-12-20150114-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1345 / 1420 | QA/QC Collected? (YES) NO

Well Volume (gal) = 0.041d²h: 3.7gal / 14 L | Purge Rate (L/min)[2]: ~ | QA/QC I.D. DUP-03-20150114-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.5L | Laboratory Analyses: COI / MNAs

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1355	13.3	0.246	0.79	5.73	-4.9	3.11	1	7.51	Strong odor coming from well
1400	13.7	0.249	0.52	5.64	-7.5	1.56	1.5	7.51	
1405	14.2	0.259	1.54	5.56	-11.6	6.26	2	7.52	
1410	12.9	0.257	0.65	5.47	-9.7	6.57	2.5	7.52	
1415	12.7	0.253	0.31	5.46	-10.1	1.98	3	7.52	
1420	12.4	0.252	0.33	5.46	-11.2	1.47	3.5	7.53	
	Well Parameters Stable @						1420		
	Well Sampled @					1423			
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Auguste | Sampler's Name: M. Virgo

Well ID: MW-19 | Pump Type/Model: Peristaltic | Sample Collection Time: 1645

Total Depth (ft)[1]: 19.7 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.2 L/min

Depth to Water (ft): 12.42 | Pump Intake Depth (ft): ~17 | Sample ID: MW-19-20150114-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1530 / 1643 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.2gal / 4.5L | Purge Rate (L/min)[2]: ~0.1 - 0.25L/min | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 16.75L | Laboratory Analyses: COI / MNA

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1540	13.4	0.475	2.31	5.90	57.5	1.47	1	12.74	
1558	16.6	0.495	1.63	5.88	80.9	3.79	5.5	13.44	Vol1 Excessive Drawdown
1616 ~~1616~~	15.7	0.527	1.07	5.87	100.2	2.97	10	13.46	Vol2 3 well volumes
1634 ~~1634~~	16.2	0.522	0.82	5.84	109.7	2.34	14.5	13.43	Vol3 Purged
1637	16.4	0.532	0.80	5.84	110.7	1.75	15.25	13.43	
1640	16.5	0.530	0.78	5.84	111.5	1.91	16	13.43	Purge Rate increased
1643	16.0	0.529	0.77	5.84	113.4	1.55	16.75	13.43	to ~0.25mL/min
	Well Parameters Stable ✓						1643		
	Well Sampled ✓				1645				
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AbL | Project No.: | Sampling Date: 1/12/14

Site/Location: Augusta | Sampler's Name: Ryan Mayo He

Well ID: MW-21 | Pump Type/Model: Peristaltic | Sample Collection Time: 1110

Total Depth (ft)[1]: ~~28~~ 27.9 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 6.92 | Pump Intake Depth (ft): 27.5 | Sample ID: MW-21-20150112-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1035 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: 3.35 | Purge Rate (L/min)[2]: 0.025 | QA/QC I.D. ~~MW-21-2015-01~~ ~~FB-01~~

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 1.25 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1035	16.5	627	2.81	6.12	122.1	4.03	—	6.92	
1040	16.9	626	1.36	6.01	108.8	3.96	.125	6.92	
1045	17.1	619	1.01	6.01	96.3	3.27	.25	6.92	
1050	17.2	619	0.73	6.03	84.6	3.15	.375	6.92	
1055	17.6	615	0.56	6.04	77.3	3.06	.875	6.92	
1100	17.4	615	0.46	6.05	69.2	3.02	1.0	6.92	
1105	17.4	613	0.43	6.05	65.2	3.00	1.125	6.92	
1110	17.3	614	0.42	6.06	63.9	2.97	1.25	6.92	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

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GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-22 | Pump Type/Model: Pegasus | Sample Collection Time: 15:55

Total Depth (ft)[1]: 22.3 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 5.72 | Pump Intake Depth (ft): 19.5 | Sample ID: MW-22-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 15:20 – 15:50 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.7(GAL) 10.1(L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
15:25	16.2	201.5	3.18	6.17	-20.2	.97	1.0	5.78	
15:30	16.3	199.6	2.16	6.16	-20.6	.84	2.0	5.78	
15:35	16.0	196.7	2.18	6.15	-20.9	.77	3.0	5.78	
15:40	15.7	196.2	2.13	6.15	-21.4	.33	4.0	5.78	
15:45	15.4	195.7	2.06	6.14	-22.1	.33	5.0	5.78	
15:50	15.5	195.6	2.08	6.13	-22.3	.35	6.0	5.78	
15:55									Sampling @ 15:55
									11 Containers
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

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GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-202DR | Pump Type/Model: Pegasus | Sample Collection Time: 14:25

Total Depth (ft)[1]: 29.5 | Tubing Material: Poly 3/4 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 7.60 | Pump Intake Depth (ft): 25.00 | Sample ID: MW-202DR-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 13:50 – 14:20 | QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 3.6 (GAL) 13.5 (L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D. ———

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 | Laboratory Analyses:

Well Condition: Good

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
13:55	16.7	522.9	4.54	6.17	-6.8	2.15	1.0	7.60	
14:00	16.7	521.7	3.70	6.18	-8.3	2.11	2.0	7.60	
14:05	16.5	521.1	3.41	6.17	-11.0	2.14	3.0	7.60	
14:10	16.4	523.4	1.91	6.13	-12.7	2.07	4.0	7.60	
14:15	16.6	523.1	1.85	6.14	-14.8	1.98	5.0	7.60	
14:20	16.5	523.6	1.29	6.13	-16.1	1.74	6.0	7.60	
14:25									Sampling @ 14:25
									11 Containers
Stabilizing Criteria[5]	✓ +/- 1°C	✓ +/- 3%	✓ +/- 10% (see note below)[7]	✓ +/- 0.1 unit	✓ +/- 10 mV (see note below)[8]	✓ +/- 10% or <10 NTUs	✓ (see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

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GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-203 | Pump Type/Model: PERISTALTIC/Regusus Alexis | Sample Collection Time: 1550

Total Depth (ft)[1]: 26 | Tubing Material: POLY/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 6.85 | Pump Intake Depth (ft): 20 | Sample ID: MW-203-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1515/1650 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1525	15.4	0.264	2.15	6.36	31.4	3.31	0.5	6.86	
1530	15.8	0.237	1.82	6.31	44.5	2.35	1.0	6.86	
1535	15.9	0.224	1.81	6.31	54.3	1.40	1.5	6.85	
1540	15.4	0.223	1.64	6.29	59.9	1.55	2.0	6.85	
1545	15.6	0.224	1.72	6.28	69.3	1.70	2.5	6.85	
1550	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

* 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

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GROUND WATER SAMPLING SHEET

Client: AGL Project No.: _____ Sampling Date: 1-15-15

Site/Location: Augusta Sampler's Name: A. NEAL / WILL V.

Well ID: MW-205 Pump Type/Model: _____ Sample Collection Time: _____

Total Depth (ft)[1]: 28.1 Tubing Material: _____ Sample Purge Rate (L/min)[3]: _____

Depth to Water (ft): _____ Pump Intake Depth (ft): _____ Sample ID: _____

Well Diameter (in): 2 Start/Stop Purge Time: _____ QA/QC Collected? _____

Well Volume (gal) = $0.041d^2h$: _____ Purge Rate (L/min)[2]: _____ QA/QC I.D. _____

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): _____ Laboratory Analyses: _____

Well Condition: _____ Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☑ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1220	DROPPED BAILER IN WELL, CAME OUT VERY NASTY WITH NAPL; → NOT SAMPLED								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-206 | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 1425

Total Depth (ft)[1]: 27.9 | Tubing Material: POLY / SILICON | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): ~~6.43~~ 6.42 | Pump Intake Depth (ft): ~20 | Sample ID: MW-206-20150117-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1350 / 1500 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: GOOD

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1400	13.3	0.713	7.13	8.32	23.4	9.53	0.5	6.44	
1405	13.1	0.711	7.10	8.33	27.5	5.87	1.0	6.44	
1410	12.6	0.712	8.14	8.35	35.1	7.03	1.5	6.44	
1415	12.6	0.712	7.45	8.34	37.9	9.50	2.0	6.44	
1420	12.4	0.711	7.73	8.29	42.6	8.75	2.5	6.44	
SAMPLE TIME —			1425						
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

* 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AbL | Project No.: | Sampling Date: 1/12/15

Site/Location: Augusta | Sampler's Name: Ryan Mayette

Well ID: MW-207 | Pump Type/Model: Peristaltic | Sample Collection Time: 1220

Total Depth (ft)[1]: 24.6 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): N/A | Pump Intake Depth (ft): 24.3 | Sample ID: MW-207-20150112-0(

Well Diameter (in): 2 | Start/Stop Purge Time: 1145 | QA/QC Collected? NP

Well Volume (gal) = 0.041d²h: N/A | Purge Rate (L/min)[2]: .025 | QA/QC I.D. NP

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Obstruction | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1145	15.9	456.4	1.71	6.12	-47.5	2.86	—	—	Obstruction in well WL Meter
1150	16.6	525.7	0.59	6.06	-53.2	2.59	.125	—	can not pass. Tubing can pass
1155	16.4	524.7	0.47	6.05	-53.6	2.51	.25	—	by obstruction
1200	16.2	521.2	0.40	6.05	-53.6	2.40	.325	—	
1205	16.3	515.1	0.35	6.05	-54.7	2.38	.875	—	
1210	16.4	513.0	0.32	6.05	-56.6	2.31	1.0	—	
1215	16.4	~~513~~ 513.2	0.32	6.05	-56.7	2.20	1.125	—	
1220	16.5	~~513~~ 513.1	0.30	6.05	-56.9	2.17	1.25	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712p LOG2 | Sampling Date: 01-29-2015

Site/Location: Augusta, GA | Sampler's Name: B. Mitchell

Well ID: MW-207 | Pump Type/Model: Peristaltic Geopump | Sample Collection Time: 14:25

Total Depth (ft)[1]: 24.6 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.1 L/min

Depth to Water (ft): 5.50 | Pump Intake Depth (ft): 22.6 | Sample ID: MW-207-29012015-01

Well Diameter (in): 2" | Start/Stop Purge Time: 12:25 / | QA/QC Collected? yes

Well Volume (gal) = 0.041d²h: 3.1 gal / 12L | Purge Rate (L/min)[2]: 0.1 L/min - 0.5 L/min | QA/QC I.D. MS/MSD

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 38.3 L | Laboratory Analyses: COC

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
12:30	16.18	0.627	3.20	5.94	-45.5	340	0.5	6.31	Drawdown > 0.3ft. switch to 3rd vol purge. Increase to 0.5 L/min
12:45									
12:10	18.56	0.385	0.41	6.07	-36.6	124	12L	8.95	1st vol
13:34	19.42	0.500	0.40	6.08	-45.4	66.7	24L	9.86	2nd vol
13:58	19.50	0.589	0.25	6.08	-52.2	27.0	36L	10.24	3rd vol, decrease to 0.1 L/min
14:01	18.95	0.596	0.23	6.08	-54.1	28.0	36.32	9.80	
14:05	18.62	0.598	0.23	6.08	-56.2	25.6	36.82	9.55	
14:10	18.30	0.602	0.23	6.09	-58.7	23.2	37.32	8.97	
14:15	18.58	0.602	0.23	6.10	-59.0	22.3	37.82	8.63	
14:20	18.17	0.604	0.23	6.09	-58.2	24.8	38.32	8.46	pressure stuck; sample
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

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ERM

GROUND WATER SAMPLING LOG SHEET

Client: LALC | Project No.: 0230712-52 | Sampling Date: 01/13/2015

Site/Location: ATHENS, GA | Sampler's Name: A. SHORBEDITS

Well ID: MW-213 | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 11:20

Total Depth (ft)[1]: ~63' bgs | Tubing Material: LDPE 1/4" x 0.17 | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.73 | Pump Intake Depth (ft): 60.0 bgs | Sample ID: MW-213-20150113-01

Well Diameter (in): 2.00 | Start/Stop Purge Time: 09:12/11:11 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 9.01 (34.1L) | Purge Rate (L/min)[2]: 0.1 / 0.4 / 0.1 | QA/QC I.D. N/A.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~31.5 | Laboratory Analyses: COI

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

Method: LOW FLOW (LOW VOLUME) LOW STRESS ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
09:20	12.5	0.574	~~2.56~~ 2.22	7.09	-38.1	18.8	0.3	7.86	Slight odour, yellow tinge.
09:25	13.4	0.650	1.18	6.56	-51.1	7.98	0.8	8.30	
DRAWDOWN > 0.3 ft, SWITCHING TO THREE WELL VOLUMES									
			49				—		
10:50	19.0	0.63	0.~~49~~	6.12	-86.7	5.50	~30	16.10	NOT FEASIBLE TO WAIT FOR
									THREE VOLUMES AND PRODUCE
11:00	16.6	0.65	0.22	6.13	-86.9	2.98	~30.5	15.01	102L OF WASTE, SWITCHING
11:05	15.8	0.64	0.30	6.14	-82.4	3.86	~31.0	14.80	BACK TO LOW FLOW/VOL GIVEN
11:10	15.2	0.65	0.33	6.14	-80.2	3.31	~31.5	14.50	THAT ONE VOLUME HAS BEEN
									REMOVED FROM WELL;
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									WL IS RISING.
Stabilizing Criteria[5]	~~0.02~~ ✓ +/- 1°C	0.02 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	✓ +/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

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GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-214 | Pump Type/Model: Peristaltic | Sample Collection Time: 1425

Total Depth (ft)[1]: 56.6 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~.2 L/min

Depth to Water (ft): 6.55 | Pump Intake Depth (ft): ~53 | Sample ID: MW-214-20150113-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1355/1420 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 8.2 gal / 31.1 L | Purge Rate (L/min)[2]: ~0.1 | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 L | Laboratory Analyses: 8260 / MNA

Well Condition: Good | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1405	16.1	0.220	0.85	6.58	-60.3	21.4	1	6.66	Weather: Rainy ~50°F
1410	16.6	0.222	0.67	6.55	-65.0	5.79	1.5	6.67	
1415	16.5	0.226	0.51	6.53	-72.1	2.57	2	6.68	Filled extra MNA
1420	16.6	0.226	0.45	6.51	-73.5	2.19	2.5	6.69	Bottle 250ML
	Well Parameters stable @ 1420								
	Well Sampled @ 1425								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
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(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/13/2013

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-303 | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 15:05

Total Depth (ft)[1]: ~30.5 bgs | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 6.13 | Pump Intake Depth (ft): 27.0 bgs | Sample ID: MW-303-20150113-01

Well Diameter (in): 2.0 | Start/Stop Purge Time: 14:26 / 14:55 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 3.97 (15.0L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.4 | Laboratory Analyses: COI & MNA

Well Condition: GOOD

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
14:34	14.5	0.544	1.12	5.72	154.4	10.1	0.3	6.14	
14:39	14.9	0.543	0.71	5.72	45.0	7.9	0.8	6.14	
14:44	15.1	0.542	0.65	5.72	23.4	8.12	1.3	6.14	
14:49	15.4	0.548	0.53	5.70	3.2	3.33	1.8	6.14	
14:54	15.5	0.545	0.57	5.69	-4.2	1.24	2.3	6.14	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									
Stabilizing Criteria[5]	✓ +/- 1°C	0.018 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-15-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-304 | Pump Type/Model: Pegasus | Sample Collection Time: 12:15

Total Depth (ft)[1]: 36.0 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 8.45 | Pump Intake Depth (ft): 31.00 | Sample ID: MW-304-20150115-01

Well Diameter (in): 2 | Start/Stop Purge Time: 11:40 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.5 (GAL) 17. (L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D.: —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
11:45	15.0	450.7	.63	6.05	-40.3	3.74	1.0	8.51	
11:50	14.6	447.1	.41	6.06	-42.2	1.27	2.0	8.53	
11:55	14.8	448.0	.35	6.04	-43.9	1.12	3.0	8.53	
12:00	14.5	448.4	.33	6.04	-46.3	1.06	4.0	8.53	
12:05	14.6	448.1	.32	6.04	-47.0	1.04	5.0	8.53	
12:10	14.6	448.3	.32	6.04	-47.1	.94	6.0	8.53	
12:15									Sampling @ 12:15
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
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(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AbL
Project No.:
Sampling Date: 1/14/15
Site/Location: Augusta, GA
Sampler's Name: R. Mayette

Well ID: MW-306BR
Pump Type/Model: Perista/Hz
Sample Collection Time: 1050
Total Depth (ft)[1]: 73.25
Tubing Material: Poly
Sample Purge Rate (L/min)[3]: .025
Depth to Water (ft): 8.02
Pump Intake Depth (ft): 73.0
Sample ID: MW-306BR-20150114-01
Well Diameter (in): 6
Start/Stop Purge Time: 1010
QA/QC Collected? N/A
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: .025
QA/QC I.D. N/A
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 1.0
Laboratory Analyses:
Well Condition: Good

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1015	11.8	353.9	3.34	6.97	-83.1	4.21	.125	8.03	
1020	13.8	408.8	1.41	7.07	-120.9	4.13	.25	8.02	
1025	14.0	459.4	1.22	7.10	-123.9	4.06	.375	8.02	
1030	14.3	483.2	0.70	7.11	-129.4	3.81	.5	8.02	
1035	14.6	490.7	0.61	7.12	-130.6	3.64	.625	8.03	
1040	15.0	495.2	0.56	7.13	-131.5	3.60	.75	8.03	
1045	15.2	496.4	0.53	7.13	-132.5	3.48	.875	8.03	
1050	15.4	495.2	0.50	7.12	-131.8	3.42	1.0	8.03	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

COL

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta GA | Sampler's Name: R. Mayhe

Well ID: MW-306D | Pump Type/Model: Peristaltic | Sample Collection Time: 0920

Total Depth (ft)[1]: 25.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 7.71 | Pump Intake Depth (ft): 25.0 | Sample ID: MW-306D-20150113-01

Well Diameter (in): .75 | Start/Stop Purge Time: 0820 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: 1.55 | Purge Rate (L/min)[2]: .25 / .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0825	14.1	676	4.16	6.27	-5.4	4.08	—	—	Initial
0832	17.8	635	0.82	5.96	8.0	3.81	1.50	—	1 WV
0840	18.7	631	0.56	5.95	9.3	3.76	3.00	—	2 WV
0850	18.9	632	0.31	5.94	10.6	3.70	4.50	—	3 WV
0855	18.9	633	0.30	5.94	11.0	3.71	4.625		
0900	18.9	635	0.26	5.94	11.0	3.68	4.75	—	
0905	19.0	635	0.24	5.94	10.5	~~3.59~~ 3.60	4.875	—	
0910	19.0	634	0.23	5.94	10.8	~~5.12~~ 3.58	5.0	—	
0915	19.1	635	0.21	5.94	10.7	~~5.25~~ 3.61	5.125	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
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(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

GROUND WATER SAMPLING LOG SHEET

ERM

Client: AbL Project No.: Sampling Date: 1/13/15, 1/14/15

Site/Location: Augusta Sampler's Name: R. Mayotte

23.79 watercolumn

Well ID: MW-306SAP Pump Type/Model: Peristaltic Sample Collection Time: 0855

Total Depth (ft)[1]: 31.5 Tubing Material: Poly Sample Purge Rate (L/min)[3]:

Depth to Water (ft): 7.71 Pump Intake Depth (ft): 31.0 Sample ID: MW-306SAP-20150114-01

Well Diameter (in): .75 Start/Stop Purge Time: 0950/0814 QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: .55g 2.08L Purge Rate (L/min)[2]: .25 / .025 QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): 6.74 Laboratory Analyses:

Well Condition: Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0950	18.8	1350	2.50	6.06	37.8	36.4	—	—	Initial
~~0955~~ 1000	18.7	1405	1.67	6.08	-17.6	30.2	2.08	—	1WV
0820 ~~1010~~	~~18.2~~	1387	2.24	6.24	-31.0	28.4	4.16	—	2WV - well dry @ 2.75L
0835 ~~1020~~	15.7	1382	1.59	6.06	-21.0	15.1	6.24	—	3WV
0840	15.4	1392	1.49	6.06	-21.7	14.3	6.36	—	Retured on 1/14/15 to continue
0845	15.4	1394	1.39	6.06	-23.5	13.2	6.49	—	purge and stabalization
~~0850~~	15.4	1393	1.30	6.06	-23.1	13.0	6.61	—	
0855	15.4	1390	1.21	6.06	-23.2	12.8	6.74	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

GROUND WATER SAMPLING LOG SHEET

ERM

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: R. Mayette

Well ID: MW-306TZ | Pump Type/Model: Peristaltic | Sample Collection Time: 1140

Total Depth (ft)[1]: 59.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 8.09 | Pump Intake Depth (ft): 59.0 | Sample ID: MW-306TZ-20150113-01

Well Diameter (in): .75 | Start/Stop Purge Time: 1050 1140 | QA/QC Collected? Y/S

Well Volume (gal) = 0.041d²h: 1.18gl 4.47L | Purge Rate (L/min)[2]: .50 / .025 | QA/QC I.D. Dup-01-20150113-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1050	19.0	733	0.77	6.84	-107.9	2.14	—	—	Initial
1100	19.5	735	0.33	6.70	-95.6	1.08	4.47	—	1 WV
1110	19.6	731	0.25	6.64	-89.5	1.05	8.94	—	2 WV
1120	19.5	729	0.23	6.62	-87.2	1.01	13.41	—	3 WV
1125	19.5	731	0.21	6.62	-85.6	1.09	13.54	—	
1130	19.5	728	0.20	6.61	-85.1	1.07	13.66	—	
1135	19.6	729	0.20	6.61	-84.9	1.03	13.79	—	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

★ Dup-1 ★

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL
Site/Location: Augusta, GA
Project No.:

Sampling Date: 1/15/15
Sampler's Name: 12 Mayette. A. Neal

Well ID: MW-307BR
Total Depth (ft)[1]: —
Depth to Water (ft): —
Well Diameter (in): —
Well Volume (gal) = 0.041d²h: —
d = well diameter (inches) h = length of water column (feet)
Well Condition: Good

Pump Type/Model: Recovery Well
Tubing Material: N/A
Pump Intake Depth (ft): N/A
Start/Stop Purge Time: 1540 1550
Purge Rate (L/min)[2]: ~50
Total Purge Volume (L): —

Sample Collection Time: 1540
Sample Purge Rate (L/min)[3]: —
Sample ID: MW-307BR-20150115-01
QA/QC Collected? — Dup-4-20150115-01
QA/QC I.D. Dup 4-20150115-01
Laboratory Analyses:

Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
N/A	N/A	N/A	N/A	N/A	N/A	—	—	—	No parameters Recorded.
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL-Augusta | Project No.: | Sampling Date: 1/12/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayette

Well ID: MW-307D | Pump Type/Model: Peristaltic | Sample Collection Time: 1530

Total Depth (ft)[1]: 25.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 5.78 | Pump Intake Depth (ft): 25.0 | Sample ID: MW-307D-20150112-01

Well Diameter (in): | Start/Stop Purge Time: 1450 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: .11 (.43L) | Purge Rate (L/min)[2]: .15, .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1450	15.3	432.4	2.33	6.36	-19.3	10.23	—	—	Initial
1458	16.5	442.7	1.37	6.22	-28.8	8.44	.43	—	1WV
1505	17.2	446.5	0.63	6.22	-30.7	8.09	.86	—	2WV
1510	17.4	447.6	0.48	6.21	-32.1	7.85	1.29	—	3WV
1515	17.4	450.0	0.42	6.21	-32.7	7.63	1.41	—	
1520	17.4	451.4	0.39	6.21	-33.0	7.41	1.53	—	
1525	17.5	450.2	0.36	6.21	-33.0	7.38	1.66	—	
1530	17.5	450.4	0.37	6.21	-32.8	7.32	1.78	✓	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC Project No.: 0230712 phase2 Sampling Date: 1/29/15

Site/Location: Augusta, GA Sampler's Name: Barrett Hatcher / Dan Bowling

19.85

Well ID: MW-307D Pump Type/Model: Geopump Peristaltic Pump Sample Collection Time: 1257

Total Depth (ft)[1]: 25.5 Tubing Material: Tyg. 1/4" Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 5.65 Pump Intake Depth (ft): 25.00 Sample ID: MW-307D-20150129-01

Well Diameter (in): .75 Start/Stop Purge Time: 1234 - 1257 QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 0.46(g) / 1.7(L) Purge Rate (L/min)[2]: .75 L/min → 0.1 L/min QA/QC I.D. n/a

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): 6.75 Laboratory Analyses: COI

Well Condition: good Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1240	19.17	0.420	8.19	7.62	21.0	241	0.5	n/a	initial yellow tube
1242	19.88	0.453	2.02	6.65	-44.1	97.7	2.0	n/a	1 vol
1244	20.09	0.458	2.24	6.57	-14.0	81.7	3.5	n/a	2 vol
1247	20.25	0.462	2.48	6.50	-14.3	57.9	5.75	n/a	3 vol
1252	19.55	0.457	3.15	6.42	-16.7	12.6	6.25	n/a	reduced flow to 0.1 L/min
1257	19.53	0.457	2.64	6.43	1.9	4.28	6.75	n/a	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-307 SAP | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 1140

Total Depth (ft)[1]: 31.5 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 6.16 | Pump Intake Depth (ft): ~30' | Sample ID: MW-307SAP-20150113-01

Well Diameter (in): 0.75 | Start/Stop Purge Time: 1000 / ~~1140~~ 1210 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 0.726 gal (2.75 L) | Purge Rate (L/min)[2]: ~~0.2~~ 0.1 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 9.4 | Laboratory Analyses: VOCs, sVOCs, Total Metals, Cyanide

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1010	14.6	0.289	7.86	6.55	38.9	4.05	0.5	—	Initial
1037	17.9	0.569	0.67	6.11	24.7	2.17	3.25	—	1st Well Volume
1104	17.7	0.565	0.41	6.06	30.7	0.85	6.0	—	2nd Well Volume
1131	17.3	0.563	0.51	6.07	35.2	0.39	8.75	—	3rd Well Volume
1134	17.6	0.563	0.39	6.06	34.2	0.66	9.1	—	
1137	17.6	0.564	0.37	6.06	34.3	0.39	9.4	—	
1140	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AbL
Site/Location: Augusta, GA
Project No.:
Sampling Date: N/A 1/15/15
Sampler's Name: N/A

Well ID: MW-308BR
Pump Type/Model:
Sample Collection Time:

Total Depth (ft)[1]:
Tubing Material:
Sample Purge Rate (L/min)[3]:

Depth to Water (ft):
Pump Intake Depth (ft):
Sample ID:

Well Diameter (in):
Start/Stop Purge Time:
QA/QC Collected?

Well Volume (gal) = $0.041d^2h$:
Purge Rate (L/min)[2]:
QA/QC I.D.

d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L):
Laboratory Analyses:

Well Condition:
Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
									Pump not functioning
									No flow Available.
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0220712 ph052 | Sampling Date: 1-29-15

Site/Location: Augusta, GA | Sampler's Name: Bill Mitchell, Barrett Fischer

Well ID: MW-308BR | Pump Type/Model: ~~Bennett~~ Peristaltic pump | Sample Collection Time: 1030

Total Depth (ft)[1]: – | Tubing Material: – | Sample Purge Rate (L/min)[3]: –

Depth to Water (ft): – | Pump Intake Depth (ft): – | Sample ID: MW-308BR-20150129-01

Well Diameter (in): – | Start/Stop Purge Time: – | QA/QC Collected? Yes

Well Volume (gal) = $0.041d^2h$: – | Purge Rate (L/min)[2]: – | QA/QC I.D. DUP-05-20150129-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): – | Laboratory Analyses: COI

Well Condition: _____ | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/13/2015

Site/Location: | Sampler's Name: J. SHOREDITS

Well ID: MW-309BR | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 17:35

Total Depth (ft)[1]: ~~109~~ bgs (106.2) | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.37 btoc | Pump Intake Depth (ft): 97.0 bgs | Sample ID: MW-309BR-20150113-01

Well Diameter (in): 4.00 | Start/Stop Purge Time: 17:00 / 17:28 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 64.9 (245L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI & MNA

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
17:06	13.7	0.232	3.87	8.07	-11.1	2.76	0.3	7.32	
17:11	14.7	0.316	1.36	7.67	-132.0	2.83	0.8	7.33	
17:16	15.3	0.336	1.67	7.27	-126.6	1.29	1.3	7.33	
17:21	15.4	0.345	0.86	7.11	-131.3	1.87	1.8	7.34	
17:26	15.9	0.344	0.75	7.10	-132.1	3.01	2.3	7.34	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									
Stabilizing Criteria[5]	✓ +/- 1°C	0.01 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGCC
Project No.: 0230712 phase2
Sampling Date: 1-29-15
Site/Location: Augusta, GA
Sampler's Name: B.H. Markwell

Well ID: MW-309BR
Pump Type/Model: Geopump Peristaltic pump
Sample Collection Time: 1640
Total Depth (ft)[1]: 106.2
Tubing Material: LDPE
Sample Purge Rate (L/min)[3]: 0.1 L/min
Depth to Water (ft): 7.20
Pump Intake Depth (ft): 95.00
Sample ID: MW-309BR-01012015-01
Well Diameter (in): 4"
Start/Stop Purge Time: 1543 - 1635
QA/QC Collected? Y/S
Well Volume (gal) = 0.041d²h: n/a
Purge Rate (L/min)[2]: 0.1 L/min
QA/QC I.D. MS/MSD
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 5.52
Laboratory Analyses: COI MNA
Well Condition: good
Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H₂O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1545	18.56	0.142	4.73	7.49	-68.5	10.1	0.5	7.30	
1550	18.26	0.166	2.89	8.12	-76.2	3.09	1.0	7.24	
1558	17.88	0.165	1.66	8.50	-120.7	2.21	1.5	7.29	
1600	17.83	0.165	1.39	8.57	-110.8	1.67	2.0	7.27	
1605	17.85	0.165	1.07	8.65	-104.1	1.87	2.5	7.26	
1610	17.76	0.166	1.09	8.76	-112.3	1.48	3.0	7.26	
1615	17.81	0.166	0.80	8.79	-110.0	1.64	3.5	7.26	
1620	17.87	0.166	0.78	8.84	-92.6	3.76	4.0	7.27	
1625	18.07	0.166	0.58	8.91	-119.5	3.78	4.5	7.28	
1630	17.79	0.167	0.52	8.96	-121.2	2.58	5.0	7.27	
1635	17.80	0.167	0.47	8.97	-113.5	2.92	5.5	7.26	Pumped dry @ 5.5 gal; sample
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL Project No.: 0230712 Sampling Date: 1-12-15

Site/Location: Augusta, GA. Sampler's Name: Charlie Brooks

Well ID: MW-310BR Pump Type/Model: Pegasus Sample Collection Time: 15:00

Total Depth (ft)[1]: 90 Tubing Material: Poly 1/4 .17 Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 15.53 Pump Intake Depth (ft): 86 Sample ID: MW-310BR-20150112-01

Well Diameter (in): 4 Start/Stop Purge Time: 14:25 QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 49 (GAL) 183 (L) Purge Rate (L/min)[2]: .1 QA/QC I.D.:

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): 3.0 Laboratory Analyses:

Well Condition: Good Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
14:30	16.0	250.0	2.14	7.13	-34.5	11.7	.5	15.54	
14:35	16.6	248.7	1.27	7.13	-34.7	12.4	1.0	15.55	
14:40	16.6	248.7	1.24	7.13	-34.7	10.9	1.5	15.55	
14:45	16.6	248.5	1.20	7.13	-34.7	9.84	2.0	15.55	
14:50	16.7	248.0	1.17	7.13	-34.9	9.87	2.5	15.56	
14:55	16.7	247.9	1.16	7.13	-34.9	9.42	3.0	15.56	
15:00									sampling @ 15:00
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: August | Sampler's Name: ANDY NEAL

Well ID: MW-310SAP | Pump Type/Model: Peristaltic/Regasus Alexis | Sample Collection Time: 1615

Total Depth (ft)[1]: 35 | Tubing Material: Poly/Silicone | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 13.91 | Pump Intake Depth (ft): 30 | Sample ID: MW-310SAP-20150113-01

Well Diameter (in): 0.75 | Start/Stop Purge Time: 1520/1650 | QA/QC Collected? ND

Well Volume (gal) = 0.041d²h: 1.84 L | Purge Rate (L/min)[2]: ~~0.15~~ 0.15 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses: VOCs, SVOCs, Total Metals, Cyanide, COI, MNA

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1530	15.7	0.486	2.98	6.14	201.7	6.25	0.5	–	Initial
1542	16.0	0.451	0.83	5.65	210.6	2.44	2.25	–	1st Well Volume
1555	16.8	0.455	0.54	5.66	199.7	2.85	5.1	–	2nd Well Volume
1607	16.7	0.457	0.36	5.62	194.8	1.25	6.9	–	3rd Well Volume
1610	16.5	0.458	0.35	5.61	174.5	0.83	7.35	–	
1613	16.5	0.458	0.33	5.61	174.7	0.77	7.80	–	
1615	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

* 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-311 | Pump Type/Model: Peristaltic | Sample Collection Time: 1501

Total Depth (ft)[1]: 32' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.1

Depth to Water (ft): 6.28 | Pump Intake Depth (ft): ~31' | Sample ID: MW-311-20150115-G1

Well Diameter (in): 2" | Start/Stop Purge Time: 0815 / 1006 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.2gal / 16L | Purge Rate (L/min)[2]: ~0.1L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~50L | Laboratory Analyses: COI / MNA

Well Condition: GOOD

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0825	13.8	0.461	1.12	5.75	-37.2	3.60	1	7.25	Purge to excessive Draw
Vol 1 0857	16.0	0.426	0.11	5.90	-107.8	11.1	17	18.52	down. 3 well volumes
Vol 2 0929	16.7	0.423	0.13	5.90	-115.7	15.5	33	25.15	must be Purged
Vol 3 1001	13.9	0.426	0.43	6.24	-111.5	8.61	49	28.04	from well
1006	Well		Pumped		Dry		49.5		
		Sampled		On	Recharge				Purge Rate increased to 0.5 L/min
									After 3 well volumes Purge Rate decreased to 0.1 L/min
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: _____ Project No.: _____ Sampling Date: 1/13/15

Site/Location: _____ Sampler's Name: W. Virgo

Well ID: MW-313 Pump Type/Model: Peristaltic Sample Collection Time: 1617

Total Depth (ft)[1]: 86' Tubing Material: LDPE Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 6.54' Pump Intake Depth (ft): ~59' Sample ID: MW-313-20150113-01

Well Diameter (in): 4" Start/Stop Purge Time: 1520 / 1614 QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 52.1 gal / 197.2 L Purge Rate (L/min)[2]: ~0.1L/min QA/QC I.D. _____

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): ~5.4 L Laboratory Analyses: VOC / MNA

Well Condition: Good Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1530	11.8	0.156	1.50	9.18	-53.4	20.0	1	6.54	Weather: Cold ~45°F
1535	12.2	0.178	0.95	8.69	-35.1	24.4	1.5	6.55	+ Rainy
1540	11.3	0.174	0.99	8.67	-36.0	21.9	2	6.56	
1545	10.7	0.166	1.02	8.75	-37.8	36.6	2.5	6.56	Filled extra MNA
1550	10.3	0.165	1.15	8.79	-37.0	28.4	3	6.56	Bottle - 250mL
1555	10.0	0.164	1.28	8.80	-36.5	26.8	3.5	6.57	
1600	11.9	0.167	0.57	8.76	-37.8	26.3	4	6.57	
1605	13.3	0.169	0.62	8.71	-39.4	15.3	4.5	6.57	
1608	13.5	0.171	0.71	8.70	-39.5	11.1	4.8	6.58	
1611	13.9	0.174	0.57	8.70	-40.2	10.6	5.1	6.58	
1614	13.9	0.173	0.74	8.69	-39.2	10.4	5.4	6.58	
	Well Parameters stable @						1614		
	well sampled @					1617			
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

11 - bottles filled

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: R. Mayette

Well ID: MW-315 | Pump Type/Model: Peristaltic | Sample Collection Time: 1500

Total Depth (ft)[1]: 85.5 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 7.63 | Pump Intake Depth (ft): 85.0 | Sample ID: MW-315-20150113-01

Well Diameter (in): 6 | Start/Stop Purge Time: 1415 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. Dup-2-20150113-01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~~120~~ .875 | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1420	17.8	180.3	4.02	7.11	-88.6	1.63	-	7.63	
1425	18.2	553.2	1.95	6.57	-66.3	1.59	.125	7.68	
1430	18.3	598.0	1.10	6.55	-70.5	1.54	.25	7.69	
1435	18.4	619	1.06	6.53	-72.7	1.50	.375	7.69	
1440	18.5	619	0.87	6.53	-74	1.43	.5	7.70	
1445	18.4	617	0.70	6.53	-74.1	1.36	.625	7.71	
1450	18.4	620	0.63	6.52	-74.4	1.13	.75	7.71	
1455	18.6	616	0.61	6.51	-74.7	1.06	.875	7.72	
							~~102~~	~~7.72~~	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

Dup-2

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-318 | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 14:45

Total Depth (ft)[1]: 87.0 bgs | Tubing Material: LDPE/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.47 Stoc | Pump Intake Depth (ft): 75.0 bgs | Sample ID: MW-318-20150114-01

Well Diameter (in): 4.00 | Start/Stop Purge Time: 14:08 / 14:40 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 52.2 (197L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.9 | Laboratory Analyses: COI & MNA

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
14:14	11.4	0.207	3.11	9.10	-65.3	20.5	0.3	7.47	Pieces of sediment in purge water.
14:19	13.7	0.582	1.52	8.60	-85.7	5.68	0.8	7.48	
14:24	15.1	0.660	0.95	8.42	-83.5	0.97	1.3	7.47	
14:29	15.7	0.700	0.68	8.37	-87.5	0.95	1.8	7.48	
14:34	15.3	0.710	0.60	8.33	-87.3	0.54	2.3	7.48	
14:39	14.9	0.710	0.53	8.33	-86.5	1.02	2.8	7.48	
PARAMETERS	ARE	STABLE,	WELL	CAN	BE	SAMPLED			
Stabilizing Criteria[5]	✓ +/- 1°C	0.02 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AbL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayette

Well ID: MW-319 | Pump Type/Model: Peristaltic | Sample Collection Time: 1435

Total Depth (ft)[1]: 80 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 8.98 | Pump Intake Depth (ft): ~~79.5~~ | Sample ID: MW-319-20150114-01

Well Diameter (in): 6" | Start/Stop Purge Time: 1350 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1355	16.0	169.5	3.38	7.68	-134.7	6.12	—	8.98	
1400	16.8	372.1	1.47	7.05	-123.5	6.02	.125	8.98	
1405	17.0	393.0	1.06	7.04	-124.9	5.72	.25	8.99	
1410	16.9	407.1	0.79	7.02	-126.4	5.46	.325	8.98	
1415	17.2	406.7	0.67	7.01	-127.0	5.13	.5	8.98	
1420	17.3	408.7	0.63	6.99	-128.0	5.01	.625	8.98	
1425	17.3	408.6	0.54	6.99	-128.3	4.39	.75	8.98	
1430	17.4	407.9	0.52	6.99	-126.6	4.11	1.00	8.98	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-12-15

Site/Location: Augusta, GA | Sampler's Name: Charlie Brooks

Well ID: MW-320 | Pump Type/Model: Pegasus | Sample Collection Time: 11:35

67.5 Total Depth (ft)[1]: 76.00 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): 8.50 | Pump Intake Depth (ft): 73.00 | Sample ID: MW-320-20150112-01

Well Diameter (in): 4 | Start/Stop Purge Time: 11:00 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 44.3 (GAL) 166.05 (L) | Purge Rate (L/min)[2]: .25 (L) | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 7.50 (L) | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
	~~12.0~~	~~0.09~~							
11:05	12.3	115.3	6.07	9.07	-33.1	0.56	1.25	8.50	
11:10	10.8	120.7	6.09	9.13	-33.9	0.59	2.50	8.50	
11:15	10.9	121.5	6.17	9.13	-34.0	0.48	3.75	8.50	
11:20	10.7	117.0	5.42	9.14	-36.1	0.49	5.00	8.50	
11:25	10.6	114.6	5.21	9.14	-37.0	0.45	6.25	8.50	
11:30	10.5	113.9	5.35	9.14	-37.4	0.44	7.50	8.50	
11:35									Sampling @ 11:35
Stabilizing Criteria[5]	+/- 1°C ✓	+/- 3% ✓	+/- 10% (see note below)[7] ✓	+/- 0.1 unit ✓	+/- 10 mV (see note below)[8] ✓	+/- 10% or <10 NTUs ✓	(see note below)[4] ✓	(see note below)[6] ✓	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August GA. | Sampler's Name: Charlie Brooks

Well ID: MW-321 | Pump Type/Model: Pegasus | Sample Collection Time: 8:50

Total Depth (ft)[1]: 170.2 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 7.15 | Pump Intake Depth (ft): 165.0 | Sample ID: MW-321-20150113-01

Well Diameter (in): 4 | Start/Stop Purge Time: 8:20 - 8:45 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 107(GAL) 400(L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5.00 (L) | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ ~~soda straw~~ (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
8:25	15.7	209.7	2.68	9.57	-43.0	12.4	1.00	7.21	
8:30	15.5	149.0	1.98	9.66	-38.6	1.11	2.00	7.32	
8:35	15.4	148.1	1.99	9.67	-38.4	.90	3.00	7.35	
8:40	15.4	147.4	1.92	9.67	-38.2	.90	4.00	7.35	
8:45	15.3	146.4	1.94	9.66	-37.6	1.05	5.00	7.35	
8:50									Sampling @ 8:50
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-13-15

Site/Location: August, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-324 | Pump Type/Model: Pegasus | Sample Collection Time: 10:20

Total Depth (ft)[1]: 215 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 7.70 | Pump Intake Depth (ft): 210' | Sample ID: MW-324-20150113-01

Well Diameter (in): 4 | Start/Stop Purge Time: 9:45 - 10:15 | QA/QC Collected? no

Well Volume (gal) = 0.041d²h: 136 (GAL) 510 | Purge Rate (L/min)[2]: .2 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 (L) | Laboratory Analyses:

Well Condition: Good

Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
9:50	16.2	65.4	1.03	6.77	-35.4	1.21	1.0	7.71	
9:55	16.7	61.4	.60	6.58	-36.0	1.19	2.00	7.70	
10:00	16.8	61.2	.60	6.57	-36.0	1.14	3.00	7.70	
10:05	16.9	61.4	.57	6.56	-36.1	.98	4.00	7.70	
10:10	17.2	61.2	.54	6.56	-36.3	.90	5.00	7.70	
10:15	17.2	61.4	.55	6.56	-36.3	.91	6.00	7.70	
10:20									Sampling @ 10:20
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta, GA | Sampler's Name: V. Virgo

Well ID: MW-325 | Pump Type/Model: Peristaltic | Sample Collection Time: 0905

Total Depth (ft)[1]: 115 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~ 0.2

Depth to Water (ft): 9.94 | Pump Intake Depth (ft): ~105' | Sample ID: MW-325-20150113-01

Well Diameter (in): 4" | Start/Stop Purge Time: 0827 / 0859 | QA/QC Collected? ~~MW-325-20150113-01~~ NO

Well Volume (gal) = 0.041d²h: 68.9 gal / 260 L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. NO

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~3.1 L | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0838	17.1	0.093	1.20	8.44	-14.0	1.77	~1 L	9.95	
0843	18.1	0.092	0.73	8.79	-51.0	1.67	1.5	10.03	
0848	17.0	0.092	0.63	8.88	-70.4	1.53	2	10.18	
0853	15.9	0.093	0.65	8.94	-79.8	1.54	2.5	10.23	
0856	16.0	0.093	0.67	8.96	-85.4	1.60	32.8	10.27	3 well Volumes Ignored due to 260L Volumes not logical to Purge 780L ; well purged till Stable
0859	15.5	0.093	0.65	8.96	-89.1	1.54	3.1	10.30	
	Well Parameters Stable @						0859		
	Well Sampled @ 0905								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL
Project No.: 0230712
Sampling Date: 1-14-15
Site/Location: ~~Aust~~ Augusta, GA.
Sampler's Name: Charlie Brooks

Well ID: MW-401D
Pump Type/Model: Pegasus
Sample Collection Time: 14:25
Total Depth (ft)[1]: 36.0
Tubing Material: Poly
Sample Purge Rate (L/min)[3]: .2
Depth to Water (ft): 9.50
Pump Intake Depth (ft):
Sample ID: MW-401D-20150114-01
Well Diameter (in): 2
Start/Stop Purge Time: 13:50 - 14:20
QA/QC Collected? — NO
Well Volume (gal) = 0.041d²h: 4.3 16(L)
Purge Rate (L/min)[2]: .2
QA/QC I.D: —
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 6.0(L)
Laboratory Analyses:
Well Condition: NO Lid
Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
13:55	14.1	513.2	2.50	6.27	-33.7	9.12	1.0	9.60	
14:00	14.3	512.9	2.36	6.24	-33.9	9.00	2.0	9.60	
14:05	14.7	512.3	1.75	6.20	-35.0	5.76	3.0	9.60	
14:10	14.7	512.2	1.65	6.19	-37.8	5.43	4.0	9.60	
14:15	14.4	513.8	1.69	6.20	-40.0	5.17	5.0	9.60	
14:20	14.7	513.0	1.33	6.17	-41.9	5.05	6.0	9.60	
14:25									Sampling @ 14:25
									11 Containers
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-401S | Pump Type/Model: Peristaltic | Sample Collection Time: 1108

Total Depth (ft)[1]: 19' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~~MW-401S 20150115-01~~ ~0.2 L/min

Depth to Water (ft): 9.99 | Pump Intake Depth (ft): ~15' | Sample ID: MW-401S-20150115-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1035/1105 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.47gal / 5.6L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. ———

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3L | Laboratory Analyses: COI/MNA

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1045	11.1	0.481	2.00	5.61	14.8	9.85	1	10.01	
1050	12.6	0.488	1.68	5.44	32.8	10.0	1.5	10.02	
1055	13.6	0.486	1.49	5.40	40.9	9.51	2	10.02	
1100	13.2	0.487	1.38	5.39	46.3	8.58	2.5	10.02	
1105	13.5	0.487	1.37	5.38	51.6	7.47	3	10.03	
Well Parameters				Stable @		1105			
Well		Sampled @			1108				
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHORE DTS

Well ID: MW-401SAP | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 17:25

Total Depth (ft)[1]: ~~45.0~~ bgs ±40.0 | Tubing Material: LDPE/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 10.02 Stbe | Pump Intake Depth (ft): ~~42.0~~ 38.0 | Sample ID: MW-401SAP-20150114-01

Well Diameter (in): 2.00 | Start/Stop Purge Time: 16:40/17:19 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.89 (18.5 L) | Purge Rate (L/min)[2]: 0.05 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 1.40 | Laboratory Analyses: COI & MNA

Well Condition: GOOD. | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
16:57	7.9	0.265	4.42	7.27	115.1	6.84	0.3	10.06	
17:02	7.6	0.265	3.70	7.09	130.7	5.67	0.855	10.16	
17:07	7.6	0.259	3.25	6.95	143.2	5.11	0.8	10.22	
17:12	7.5	0.257	3.03	6.89	152.3	5.51	1.05	10.28	
17:17	7.5	0.254	2.80	6.84	159.3	3.84	1.30	10.35	
PARAMETERS	ARE	STABLE,	WELL	CAN	BE	STABILIZED			
Stabilizing Criteria[5]	✓ +/- 1°C	0.004 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGC | Project No.: 0230712.phase2 | Sampling Date: 1-29-2015

Site/Location: Augusta, GA | Sampler's Name: Don Donnan / Barrett Fischer

Well ID: MW-401SAP | Pump Type/Model: Geopump Peristaltic Pump | Sample Collection Time: 1530

Total Depth (ft)[1]: 43.10 | Tubing Material: Idpe .17x1/4 | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 9.73 | Pump Intake Depth (ft): 40.00 chased w/ down | Sample ID: MW-401SAP-20150129-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1338 | QA/QC Collected? yes

Well Volume (gal) = 0.041d²h: 5.47gal / 20.7L | Purge Rate (L/min)[2]: .05 L/min - 0.75 → 0.1 | QA/QC I.D. Dup-06-20150129-01 / MS/MSD

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 63.75 | Laboratory Analyses: COI MNA

Well Condition: Good | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1340	19.08	0.277	4.76	6.04	58.0	1.97	0.5	11.04	
1345	19.11	0.277	4.78	5.95	70.8	1.33	0.75	11.58	excessive drawdown switch to 3well
1412	19.69	0.274	4.06	5.83	97.0	1.85	21.00	27.49	Intro tube purge ; increased flow to 0.75
1440	19.10	0.290	3.67	5.92	103.5	1.54	42.00	28.42	2vol
1507	19.24	0.294	2.06	5.93	99.8	1.23	42.25	28.42	3vol
1512	18.09	0.287	2.10	5.92	98.7	1.20	62.75	27.36	reduced flow to 0.1 L/min
1517	18.07	0.286	1.98	5.94	98.7	1.36	63.25	26.76	
1522	17.92	0.286	1.97	5.94	98.6	0.84	63.75	26.18	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-402D | Pump Type/Model: PERISTALTIC / PEGASUS ALEXIS | Sample Collection Time: 1430

Total Depth (ft)[1]: 26.2 | Tubing Material: POLY / SILICON | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 12.42 | Pump Intake Depth (ft): ~22 | Sample ID: MW-402D-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1405 / 1505 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: VOCs, sVOCs, Total Metals, Cyanide, COC, MNA

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1410	15.9	0.597	1.30	6.03	197.1	2.65	0.5	12.43	
1415	16.2	0.606	0.55	6.00	196.7	5.82	1.0	12.43	
1420	16.3	0.609	0.50	6.00	196.7	7.37	1.5	12.43	
1425	16.0	0.611	6.41	5.99	194.6	7.73	2.0	12.43	
1430	16.2	0.615	0.44	6.00	193.1	6.44	2.5	12.43	
1430	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

X 11 Bottles

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING . . SHEET

Client: AGL | Project No.: | Sampling Date: 1-12-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-402S | Pump Type/Model: Peristaltic / Alexis Pegasus | Sample Collection Time: 1430 ~~1500~~

Total Depth (ft)[1]: 19 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 12.49 | Pump Intake Depth (ft): ~15 | Sample ID: MW-402S-20150112-01

Well Diameter (in): 2" | Start/Stop Purge Time: 1350 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.5 | Laboratory Analyses: VOCs, sVOCs, Metals, Cyanide

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1355	16.1	0.692	0.72	5.89	166.3	2.22	0.5	12.50	
1400	17.1	0.614	0.53	5.90	194.8	1.70	1.0	12.50	
1405	17.4	0.596	0.44	5.89	204.4	1.89	1.5	12.50	
1410	17.4	0.593	0.45	5.90	206.4	2.02	2.0	12.50	
1415	17.4	0.594	0.44	5.90	207.7	1.92	2.5	12.50	
1420	17.4	0.598	0.45	5.90	208.5	1.72	3.0	12.50	
1425	17.7	0.596	0.46	5.90	210.1	1.70	3.5	12.50	
1430	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-14-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-404DR | Pump Type/Model: Pegasus | Sample Collection Time: 16:30

Total Depth (ft)[1]: 21.5 | Tubing Material: Poly 1/4 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): 7.50 | Pump Intake Depth (ft): 19.00 | Sample ID: MW-404DR-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 15:25 - 16:27 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.3 (GAL) 8.6 (L) | Purge Rate (L/min)[2]: .1 & .5 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 29.5 | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
15:30	15.0	432.4	4.15	6.07	-34.1	5.78	.5	7.81	Water level Dropped more than .3
15:35	15.9	432.7	3.60	6.07	-34.3	5.20	3.0	8.25	Moving to 3 Well VOL. Method & Change Purge Rate to .5
15:46	16.2	440.8	3.21	6.06	36.5	4.90	9.0	9.95	1 Well VOL
16:04	15.5	450.0	3.86	6.06	-41.3	3.91	18.0	9.95	2 Well VOL
16:18	15.4	450.0	3.46	6.05	-41.5	3.81	23.5	9.95	
16:22	15.4	449.9	3.29	6.06	-41.6	3.07	27.0	9.95	3 Well VOL
16:27	15.3	450.0	3.19	6.06	-41.7	2.84	29.5	9.95	
16:30									Sampling @ 16:30
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Incorrect Id
Should be
MW-408D
01/15/2015

Client: AGL | Project No.: | Sampling Date: 1/13/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-408S | Pump Type/Model: Peristaltic | Sample Collection Time: 1130

Total Depth (ft)[1]: 20' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2

Depth to Water (ft): 8.09 | Pump Intake Depth (ft): 15' | Sample ID: MW-408S-20150113-G1

Well Diameter (in): 2" | Start/Stop Purge Time: 1033 / 1127 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.95 gal / 7.4 L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 4.20 L | Laboratory Analyses:

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1043	14.4	1.31	0.67	6.27	-96.9	41.1	1	8.15	
1048	14.4	1.32	1.53	6.27	-102.3	29.4	1.5	8.17	
1053	14.4	1.32	1.18	6.27	-103.9	33.3	2	8.18	
1058	14.4	1.32	0.44	6.28	-105.9	28.5	2.5	8.19	
1103	14.5	1.32	0.75	6.28	-106.0	35.8	3	8.19	Purge Rate Decreased
1108	14.1	1.32	0.74	6.27	-105.5	33.6	3.25	8.18	to 0.05 L/min to
~~10~~ 1113	14.0	1.32	0.87	6.28	-104.8	22.2	3.5	8.17	try and decrease
1118	13.8	1.31	~~0~~ 1.05	6.29	-103.7	16.6	3.75	8.17	turbidity
1121	13.6	1.31	0.96	6.28	-103.9	18.8	3.9	8.17	
1124	13.7	1.31	1.08	6.29	-103.9	19.7	4.05	8.16	
1127	13.7	1.31	0.84	6.29	-103.5	20.1	4.20	8.15	
	well stable @ 1127 w/ Turbidity w/in 10% over last 3 readings								
	well sampled @ 1130								
Stabilizing Criteria[5]	+/- 1°C ✓	+/- 3% ✓	+/- 10% (see note below)[7] ✓	+/- 0.1 unit ✓	+/- 10 mV (see note below)[8] ✓	+/- 10% or <10 NTUs ✓	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

16.62
24.92

ERM

GROUND WATER SAMPLING SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/15/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-408DR | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 11:25

Total Depth (ft)[1]: 24.92 btoc | Tubing Material: LDPE / SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.98 | Pump Intake Depth (ft): ~24 btoc | Sample ID: MW-408D-20150115-01

Well Diameter (in): 2.00 | Start/Stop Purge Time: 10:32 / 11:19 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.78 (10.5L) | Purge Rate (L/min)[2]: 0.05 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 1.9 | Laboratory Analyses: MNA only

Well Condition: GOOD

Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:47	9.0	0.634	2.44	6.59	16.1	28.5	0.3	8.01	WELL WAS SAMPLED ON 01/13/2015
10:52	9.6	0.612	1.26	6.48	15.6	27.6	0.55	8.04	FOR COI AFTER BEING MISTAKEN
10:57	9.2	0.617	1.61	6.43	21.0	33.2	0.8	8.07	(WRONGLY MARKED) AS MW-408S
11:02	9.0	0.614	1.42	6.41	22.6	20.1	1.05	8.09	
11:07	8.9	0.611	1.44	6.40	24.1	30.7	1.3	8.10	
11:12	9.2	0.609	0.93	6.33	26.1	30.8	1.55	8.14	
11:17	9.2	0.613	0.92	6.31	27.4	27.0	1.8	8.16	TURBIDITY ± 10% RANGE
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED									
Stabilizing Criteria[5]	✓ +/- 1°C	0.02 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING ... SHEET

Client: AGLC | Project No.: 0230712.052 | Sampling Date: 01/15/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-408S | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 12:20

Total Depth (ft)[1]: 18.64 btoc. | Tubing Material: LDPE/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.97 | Pump Intake Depth (ft): 15.0 | Sample ID: MW-

Well Diameter (in): 2.00 | Start/Stop Purge Time: 11:45/12:18 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 1.74 (6.58L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
11:55	11.0	1.55	1.33	7.48	-140.5	24.6	0.3	8.02	Black sediment in water.
12:00	11.1	1.59	1.13	7.45	-144.0	24.6	0.8	8.02	
12:05	11.1	1.60	0.75	7.46	-150.6	22.2	1.3	8.02	
12:10	11.3	1.59	0.75	7.45	-154.5	22.1	1.8	8.02	
12:15	11.8	1.60	0.71	7.36	-153.6	22.1	2.3	8.03	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED.									
Stabilizing Criteria[5]	✓ +/- 1°C	0.05 +/- ✓ 3%	+/- 10% (see note below)[7]	+/- ✓ 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712252 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-500BR | Pump Type/Model: PEGASUS PERISTALTIC | Sample Collection Time: 09:45

Total Depth (ft)[1]: 79.0 bgs | Tubing Material: LDPE / SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 8.84 bgs | Pump Intake Depth (ft): 70.0 | Sample ID: MW-500BR-20150114-01

Well Diameter (in): 4.00 | Start/Stop Purge Time: 09:00 / 09:40 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 46 (174L) | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.0 | Laboratory Analyses: COI

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

Method: LOW FLOW / VOLUME | ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
09:14	9.9	0.190	2.55	9.68	48.0	1.43	0.84	8.88	Slight odour
09:19	10.0	0.197	1.96	9.89	23.1	1.64	0.9	8.88	
09:24	10.8	0.209	1.70	10.11	1.2	2.55	1.4	8.89	
09:29	11.3	0.211	1.00	10.15	-5.8	1.89	1.9	8.89	
09:34	11.6	0.215	0.78	10.19	-13.1	1.66	2.4	8.90	
09:39	11.7	0.213	0.69	10.24	-21.6	1.82	2.9	8.90	
PARAMETERS ARE STABLE, WELL CAN BE SAMPLED.									
Stabilizing Criteria[5]	✓ +/- 1°C	0.007 ✓ +/- 3%	+/- 10% (see note below)[7]	✓ +/- 0.1 unit	+/- 10 mV (see note below)[8]	✓ +/- 10% or <10 NTUs	(see note below)[4]	✓ (see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGC | Project No.: | Sampling Date: 1-15-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-505S | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 1100

Total Depth (ft)[1]: 12 | Tubing Material: Poly / silicon | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.27 | Pump Intake Depth (ft): ~ 10.5 | Sample ID: MW-505S-20150115-01

Well Diameter (in): 2 | Start/Stop Purge Time: 1020 / 1100 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 2.9 L | Purge Rate (L/min)[2]: 0.1 - 0.15 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1030	12.6	0.614	~~1~~ 1.33	6.36	49.3	11.49	0.5	7.35	
1035	12.9	0.621	1.19	6.36	54.3	12.6	1.0	7.40	
1040	12.7	0.636	0.99	6.36	56.4	9.49	1.5	7.48	
1045	12.7	0.639	1.07	6.35	59.7	9.40	2.0	7.50	
1050	12.4	0.642	0.90	6.35	65.4	8.60	2.5	7.52	~~[illegible]~~
1100	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01-15-2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-502D | Pump Type/Model: | Sample Collection Time:

Total Depth (ft)[1]: 25.6 | Tubing Material: | Sample Purge Rate (L/min)[3]:

Depth to Water (ft): NOT STABILIZED | Pump Intake Depth (ft): | Sample ID:

Well Diameter (in): 2.00 | Start/Stop Purge Time: | QA/QC Collected?

Well Volume (gal) = 0.041d²h: NA. | Purge Rate (L/min)[2]: | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
PULLED FIVE "SOCKS"/BAGS OUT OF WELL AND DROPPED									
INTERFACE PROBE DOWN WELL.									
PRODUCT IS PRESENT AT ± 23.0 - 25.6 FT BTOC. → WELL NOT SAMPLED									
STRONG ODOR									
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AbL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-503BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1325

Total Depth (ft)[1]: 76' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2

Depth to Water (ft): 7.66 | Pump Intake Depth (ft): ~66' | Sample ID: MW-503BR-20150115-01

Well Diameter (in): 6" | Start/Stop Purge Time: 1252 / 1322 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 100.8gal / 382L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3 | Laboratory Analyses: COI / MNA

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1302	15.7	0.075	0.51	6.03	-19.2	7.47	1	7.76	
1307	15.5	0.075	0.74	5.99	-22.3	2.65	1.5	7.78	
1312	14.5	0.074	0.74	5.97	-26.6	2.18	2	7.80	
1317	14.7	0.074	6.66	5.96	-29.1	2.08	2.5	7.81	
1322	15.3	0.074	0.39	5.95	-31.9	2.27	3	7.82	
	Well Parameters Stable @						1322		
	Well Sampled @				1325				
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta | Sampler's Name: W. Virgo

Well ID: MW-504BR | Pump Type/Model: Peristaltic | Sample Collection Time: 0858

Total Depth (ft)[1]: 80 | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 7.05' | Pump Intake Depth (ft): ~70' | Sample ID: MW-504BR-20150114-01

Well Diameter (in): 4" | Start/Stop Purge Time: 0820/0855 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 47.8 gal / 181.13 | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.5 L | Laboratory Analyses: COI

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0830	13.0	0.174	1.19	9.09	-10.1	21.5	1	7.05	
0835	12.7	0.160	0.73	9.31	-34.2	7.19	1.7	7.05	
0840	12.7	0.159	0.61	9.40	-43.8	4.84	2	7.05	
0845	12.9	0.159	0.54	9.44	-50.5	3.65	2.5	7.06	
0850	12.7	0.161	0.46	9.48	-54.3	4.56	3	7.06	
0855	13.1	0.160	0.43	9.49	-60.6	4.63	3.5	7.06	
	well Parameters Stable @						0855		
	well Sampled @ 0858								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-15-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-505D | Pump Type/Model: Pegasus | Sample Collection Time: 10:00

Total Depth (ft)[1]: 28.5 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .2

Depth to Water (ft): 4.99 | Pump Intake Depth (ft): 24.00 | Sample ID: MW-505D-20150115-01

Well Diameter (in): 2 | Start/Stop Purge Time: 9:15 - | QA/QC Collected? AO

Well Volume (gal) = 0.041d²h: 3.85 (Gal) 14.5 (L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 8.0 | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
9:20	14.6	243.0	2.85	6.23	-62.8	20.9	1.0	4.99	
9:25	15.4	182.7	2.60	6.19	-60.3	14.4	2.0	4.99	
9:30	15.4	185.9	2.30	6.14	-60.5	33.5	3.0	4.99	
9:35	15.4	330.9	.71	6.08	-62.1	57.9	4.0	4.99	
9:40	15.6	419.9	.44	6.08	-64.8	20.6	5.0	4.99	
9:45	15.8	427.5	.45	6.09	-66.1	13.4	6.0	4.99	
9:50	15.6	433.9	.33	6.08	-66.9	11.2	7.0	4.99	
9:55	15.7	433.9	.29	6.07	-67.0	9.8	8.0	4.99	
10:00									Sampling @ 10:00
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGC Project No.: Sampling Date: 1/15/14

Site/Location: Augusta, GA Sampler's Name: R. Mayette

Well ID: MW-507BR Pump Type/Model: Peristaltic Sample Collection Time: 1035

Total Depth (ft)[1]: 125 Tubing Material: Poly Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 16.92 Pump Intake Depth (ft): 124.5 Sample ID: MW-507BR-20150115-01

Well Diameter (in): 6" Start/Stop Purge Time: 0940 1035 QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: Purge Rate (L/min)[2]: .025 QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) Total Purge Volume (L): Laboratory Analyses:

Well Condition: Good Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0955	14.0	231.8	4.56	8.76	-109.0	4.89	—	16.92	
1000	15.7	230.5	2.67	8.95	-114.3	4.63	.125	17.08	
1005	15.8	230.1	2.56	8.95	-114.4	4.07	.25	17.09	
1010	15.2	230.5	2.28	8.96	-114.3	3.96	.375	17.09	
1015	15.1	230.0	2.41	8.97	-114.6	3.81	.5	17.09	
1020	15.2	230.2	2.36	8.98	-114.7	3.64	.625	17.09	
1025	15.2	230.3	2.28	8.98	-114.6	3.56	.75	17.10	
1030	15.2	230.4	2.29	8.98	-114.6	3.16	.875	17.10	
1035	15.2	230.2	2.24	8.98	-114.7	3.06	1.0	17.10	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: | Sampling Date: 1/15/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayotte

Well ID: MW-508BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1210

Total Depth (ft)[1]: 86.0 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 9.89 | Pump Intake Depth (ft): 85.6 | Sample ID: MW-508BR-20150115-01

Well Diameter (in): 6 | Start/Stop Purge Time: 1120 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses: —

Well Condition: | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1125	13.9	2237	2.60	11.96	-217.6	3.88	—	9.94	
1130	15.0	2122	2.04	11.97	-222.6	3.67	.125	9.95	
1135	15.2	2059	1.45	11.97	-228.8	3.60	.25	10.05	
1140	14.8	2044	1.52	11.98	-219.1	3.42	.375	10.06	
1145	12.6	2088	1.82	12.02	-225.1	3.29	.50	10.08	
1150	11.4	2108	1.89	12.04	-227.2	3.08	.625	10.09	
1155	11.1	2102	1.87	12.06	-228.6	2.87	.75	10.09	
1200	11.0	2104	1.90	12.07	-228.4	2.03	.875	10.10	
1205	11.2	2100	1.93	12.05	-228.6	1.86	1.0	10.11	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

GROUND WATER SAMPLING LOG SHEET

ERM

Client: AGL | Project No.: | Sampling Date: 1-15-15

Site/Location: August | Sampler's Name: ANDY NEAL

Well ID: MW-509BR | Pump Type/Model: PERISTALTIC / Pegasus Alex8 | Sample Collection Time: 855

Total Depth (ft)[1]: 76 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): ~~6.84~~ 6.81 | Pump Intake Depth (ft): 0 50 | Sample ID: MW-509BR-20150115-01

Well Diameter (in): 6 | Start/Stop Purge Time: 815 / 945 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI, MNA

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

* Probe only went to ~58.5'

* 11 Bottles

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
825	15.5	0.226	1.36	9.19	-98.0	6.10	0.5	6.85	Yellowish-brown; sulfur smell
830	13.0	0.203	0.63	9.37	-111.4	5.11	1.0	6.86	
835	12.9	0.202	0.62	9.41	-115.0	4.02	1.5	6.88	
840	12.9	0.202	0.55	9.43	-119.1	4.83	2.0	6.88	
845	12.8	0.205	0.49	9.48	-124.0	3.99	2.5	6.88	
855	SAMPLE		TIME						
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling," SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-510BR | Pump Type/Model: Peristaltic/Pegasus Alexis | Sample Collection Time: 1035

Total Depth (ft)[1]: 80 | Tubing Material: POLY/SILICONE | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 6.92 | Pump Intake Depth (ft): ~65 | Sample ID: MW-510BR-20150114-01

Well Diameter (in): 6 | Start/Stop Purge Time: 1000/1120 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: COI

Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1010	15.5	0.199	0.72	7.15	-132.7	5.86	0.5	6.98	Yellow-brown color; Sulphur-like odor
1015	13.7	0.209	0.56	6.94	-136.9	7.08	1.0	7.00	
1020	12.2	0.202	0.47	6.76	-132.9	3.86	1.5	7.02	
1025	12.1	0.202	0.53	6.73	-133.4	3.76	2.0	7.02	
1030	11.7	0.203	0.43	6.72	-135.7	4.82	2.5	7.04	
1035	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING SHEET

Client: AGL | Project No.: | Sampling Date: 1-14-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-511BR | Pump Type/Model: Peristaltic/Pegasus Alexis | Sample Collection Time: ~~955~~ 905

Total Depth (ft)[1]: 76 | Tubing Material: Poly/Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.00 | Pump Intake Depth (ft): 60 | Sample ID: MW-511BR-20150114-01

Well Diameter (in): 6 | Start/Stop Purge Time: 810 / 935 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5.0 | Laboratory Analyses: COC

Well Condition: Good

Sampling Method (check all that apply): ☑ Soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
820	17.4	0.322	0.45	10.40	-88.3	37.8	0.5	7.08	Slight yellow color; Sulphur-like odor
825	17.6	0.306	0.33	10.36	-104.0	27.2	1.0	7.14	
830	16.3	0.282	0.34	10.31	-106.3	23.4	1.5	7.20	
835	13.7	0.282	0.39	10.33	-106.7	22.3	2.0	7.21	
840	11.9	0.273	0.45	10.34	-104.4	22.5	2.5	7.23	
845	11.6	0.270	0.50	10.33	-103.1	23.5	3.0	7.24	
850	11.7	0.271	0.72	10.33	-104.8	20.5	3.5	7.26	
855	11.3	0.273	0.66	10.35	-110.0	20.8	4.0	7.26	
900	11.3	0.274	0.66	10.35	-110.2	20.6	4.5	7.26	
905	11.3	0.274	0.68	10.35	-109.8	20.6	5.0	7.26	
905	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible] SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta, GA | Sampler's Name: R. Mayette

Well ID: MW-512BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1620

Total Depth (ft)[1]: 84.00 | Tubing Material: Poly | Sample Purge Rate (L/min)[3]: .025

Depth to Water (ft): 7.81 | Pump Intake Depth (ft): 83.80 | Sample ID: MW-512BR-20150114-01

Well Diameter (in): 8" | Start/Stop Purge Time: 1535 | QA/QC Collected? N/A

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: .025 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☒ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1540	15.8	432.0	3.69	7.88	-146.3	3.09	—	7.81	
1545	16.7	637	1.03	7.11	-103.6	3.01	.125	7.93	
1550	16.2	648	0.78	7.10	-104.4	2.96	.25	7.93	
1555	16.4	641	0.68	7.09	-104.2	2.80	.325	7.93	
1600	16.0	641	0.59	7.09	-103.6	2.63	.5	7.93	
1605	15.7	634	0.62	7.09	-102.3	2.47	.625	7.93	
1610	15.6	630	0.56	7.08	-102.0	2.13	.75	7.92	
1615	15.5	632	0.57	7.08	-101.9	2.01	1.0	7.92	
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1/14/15

Site/Location: Augusta | Sampler's Name: W. Virgel

Well ID: MW-513BR | Pump Type/Model: Peristaltic | Sample Collection Time: 1115

Total Depth (ft)[1]: 82' | Tubing Material: LDPE | Sample Purge Rate (L/min)[3]: ~0.2 L/min

Depth to Water (ft): 8.50 | Pump Intake Depth (ft): ~65' | Sample ID: MW-513BR-20150114-01

Well Diameter (in): 6" | Start/Stop Purge Time: 1022/1113 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 108.5 gal / 410 L | Purge Rate (L/min)[2]: ~0.1 L/min | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5 L | Laboratory Analyses: COT

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1032	14.3	0.63	0.90	6.32	-27.5	281	1	8.51	
1037	14.5	0.65	0.60	6.09	-21.1	34.5	1.5	8.51	
1042	15.0	0.66	0.89	6.08	-33.0	23.8	2	8.51	
1047	15.1	0.66	0.93	6.06	-15.0	17.6	2.5	8.51	
1052	15.1	0.65	0.92	6.05	-14.9	18.7	3	8.51	
1057	14.9	0.66	0.90	6.05	-16.2	12.8	3.5	8.52	
~~1102~~	15.4	0.65	0.96	6.04	-16.3	15.8	4	8.52	
1107	14.0	0.65	0.76	6.03	-15.1	8.69	4.5	8.52	
1110	14.0	0.65	1.05	6.03	-17.9	8.26	4.8	8.52	
1113	13.7	0.65	0.75	6.03	-14.1	8.89	5.1	8.52	
	Well Parameters Stable @							1113	
	Well Sampled @					1115			
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-14-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brooks

Well ID: MW-600 | Pump Type/Model: Pegasus | Sample Collection Time: 10:00

Total Depth (ft)[1]: 32 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): ~~5~~ 5.68 | Pump Intake Depth (ft): 30.0 | Sample ID: MW-600-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 8:10 - 9:59 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 4.3 (GAL) 16 (L) | Purge Rate (L/min)[2]: .2 & .5 | QA/QC I.D. —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): ~~50~~ 53.0 | Laboratory Analyses: See sampling Matrix

Well Condition: GOOD | Sampling Method (check all that apply): ☐ Soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
8:15	12.5	378.9	1.50	5.94	-71.9	62.7	1.0	6.05	Water level Droped more than .3 Moving
8:20	16.6	435.0	.60	5.93	-71.4	65.2	3.5	6.75	to 3 Well Vol Method & Changed purge
8:25	17.4	426.8	.39	5.94	-72.0	65.4	6.0	7.30	Rate to .5
~~8:30~~									
8:50	18.8	203.0	.40	6.16	-73.0	14.5	73.8	11.69	1 Well Vol
9:22	18.5	245.7	.34	6.11	-71.6	34.5	54.3	16.10	2 Well Vol
9:49	18.0	255.9	.18	6.10	-71.3			16.94	
9:54	18.0	256.0	.17	6.10	-71.3	50.5		17.43	3 Well Vol.
9:59	17.9	256.6	.18	6.10	-71.3	53.0		17.51	
10:00									Sampling @ 10:00
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING [illegible]G SHEET

Client: AGL | Project No.: 0230712 | Sampling Date: 1-14-15

Site/Location: Augusta, GA. | Sampler's Name: Charlie Brookes

Well ID: MW-G01 | Pump Type/Model: Pegasus | Sample Collection Time: 11:10

Total Depth (ft)[1]: 27 | Tubing Material: Poly 1/4 .17 | Sample Purge Rate (L/min)[3]: .25

Depth to Water (ft): 6.89 | Pump Intake Depth (ft): 23 | Sample ID: MW-G01-20150114-01

Well Diameter (in): 2 | Start/Stop Purge Time: 10:35 — | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: 3.2(GAL) 12(L) | Purge Rate (L/min)[2]: .2 | QA/QC I.D: —

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0(L) | Laboratory Analyses: See Sampling Matrix

Well Condition: Good | Sampling Method (check all that apply): ☒ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:40	16.0	480.9	9.4	5.91	-32.8	10.4	1.0	6.93	
10:45	16.1	508.7	.67	5.91	-33.9	8.91	2.0	6.93	
10:50	16.1	518.5	.38	5.92	-37.4	7.16	3.0	6.93	
10:55	15.9	524.7	.28	5.92	-42.1	4.77	4.0	6.93	
11:00	15.9	527.8	.27	5.92	-42.4	3.38	5.0	6.93	
11:05	15.8	528.7	.28	5.92	-42.8	3.12	6.0	6.93	
11:10									Sampling @ 11:10
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGL | Project No.: | Sampling Date: 1-13-15

Site/Location: Augusta | Sampler's Name: ANDY NEAL

Well ID: MW-602 | Pump Type/Model: Peristaltic / Pegasus Alexis | Sample Collection Time: 905

Total Depth (ft)[1]: 32 | Tubing Material: Poly / Silicone | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 7.50 | Pump Intake Depth (ft): ~25 | Sample ID: MW-602-20150113-01

Well Diameter (in): 2 | Start/Stop Purge Time: 830 / 930 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NONE

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: VOCs, sVOCs, Total Metals, Cyanide

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
840	17.0	0.613	0.57	5.78	6.7	21.0	0.5	7.61	
845	17.6	0.612	0.45	5.78	-14.1	16.5	1.0	7.61	
850	17.4	0.612	0.51	5.77	-25.6	15.0	1.5	7.61	
855	17.5	0.610	0.48	5.77	-30.3	16.9	2.0	7.61	
900	17.4	0.613	0.62	5.77	-33.0	15.5	2.5	7.61	
905	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded everv 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW everv 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: AGLC | Project No.: 0230712.52 | Sampling Date: 01/14/2015

Site/Location: AUGUSTA, GA | Sampler's Name: A. SHOREDITS

Well ID: MW-603 | Pump Type/Model: | Sample Collection Time: 10:40 (no sample collected)

Total Depth (ft)[1]: 26.61 | Tubing Material: | Sample Purge Rate (L/min)[3]:

Depth to Water (ft): 6.25 | Pump Intake Depth (ft): | Sample ID:

Well Diameter (in): 2.00 | Start/Stop Purge Time: | QA/QC Collected?

Well Volume (gal) = $0.041d^2h$: | Purge Rate (L/min)[2]: | QA/QC I.D.

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): | Laboratory Analyses:

Well Condition: GOOD | Sampling Method (check all that apply): ☐ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
± 1.0	Ft of DNAPL at bottom of well,					well,			
well	cannot be sampled.								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

Laboratory Analytical Reports

Appendix B

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

January 22, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501859

Analytical Environmental Services, Inc. received 7 samples on 1/13/2015 12:02:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501859

Date: 01/12/2015 Page 1 of 1

COMPANY	ADDRESS
ENVIRONMENTAL RESOURCES MANAGEMENT	3200 WINDY HILL RD SE SUITE 1500W ATLANTA, GA 30339
PHONE (678) 486-2700	FAX:
SAMPLED BY: R. MAYETTE, C. BROOKS, A. NEAL	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC (8260B)	SVOC (8270C)	Total Metals (6010B, 7470A)	Cyanide (9012A)	PRESERVATION (See codes) H	NA	N	NaOH	REMARKS	No # of Containers
1	MW-21-20150112-01	01/12/15	11:10	X		GW	3	2	1	1						7
2	MW-320-20150112-01	-11-	11:35													7
3	MW-207-20150112-01	-11-	12:20													7
4	MW-402S-20150112-01	-11-	14:30													7
5	MW-310BR-20150112-01	-11-	15:00												one plastic is unpr.	7
6	MW-307D-20150112-01	-11-	15:30	↓		↓	↓	↓	↓	↓						7
7	TB-01	NA	NA			W	2									2
8	TB-02	NA	NA			W	2									2
9																
10																
11																
12																
13																
14																

ANALYSIS REQUESTED

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/13/2015 9:30	1:	01-13-2015 9:30AM
2: TW	01-13-2015 12:02pm	2: Cataya Reeves	1/13/15 12:02p
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS: use site specific analyte list

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

PROJECT INFORMATION

PROJECT NAME: AHLC AUGUSTA
PROJECT #: 0230712.52
SITE ADDRESS: 812 8th St Augusta, GA 30901
SEND REPORT TO: greg.sirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 46

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

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

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

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 22-Jan-15

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501859

Case Narrative

Sample ID "TB-02" was listed on the COC, but was not received. Andreas Shoredits was notified on 1/14/15.

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-21-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:10:00 AM
Lab ID:	1501859-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 17:19	NH
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Trichloroethene	18	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 17:19	NH
Surr: 4-Bromofluorobenzene	90.8	70.6-123		%REC	201805	1	01/16/2015 17:19	NH
Surr: Dibromofluoromethane	104	78.7-124		%REC	201805	1	01/16/2015 17:19	NH
Surr: Toluene-d8	96.1	81.3-120		%REC	201805	1	01/16/2015 17:19	NH
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 11:47	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 11:47	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 11:47	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 11:47	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 11:47	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201765	1	01/19/2015 11:47	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:04	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:33	JL
Barium	0.0854	0.0200		mg/L	201743	1	01/16/2015 21:33	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-21-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:10:00 AM
Lab ID:	1501859-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:33	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:33	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:33	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-320-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:35:00 AM
Lab ID:	1501859-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/19/2015 14:36	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 14:36	GK
Surr: 4-Bromofluorobenzene	96.2	70.6-123		%REC	201805	1	01/19/2015 14:36	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201805	1	01/19/2015 14:36	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201805	1	01/19/2015 14:36	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	13	5.0		ug/L	201765	10	01/20/2015 18:40	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 14:47	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 14:47	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 14:47	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 14:47	YH
Surr: 4-Terphenyl-d14	103	55.4-136		%REC	201765	1	01/19/2015 14:47	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:16	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:37	JL
Barium	0.0287	0.0200		mg/L	201743	1	01/16/2015 21:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-320-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 11:35:00 AM
Lab ID:	1501859-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:37	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:37	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 12:20:00 PM
Lab ID:	1501859-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 17:03	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 17:03	NP
Surr: 4-Bromofluorobenzene	81.5	70.6-123		%REC	201805	1	01/16/2015 17:03	NP
Surr: Dibromofluoromethane	112	78.7-124		%REC	201805	1	01/16/2015 17:03	NP
Surr: Toluene-d8	98.7	81.3-120		%REC	201805	1	01/16/2015 17:03	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 12:13	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 12:13	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 12:13	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Indeno(1,2,3-cd)pyrene	0.058	0.050		ug/L	201765	1	01/19/2015 12:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 12:13	YH
Surr: 4-Terphenyl-d14	90	55.4-136		%REC	201765	1	01/19/2015 12:13	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:18	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:40	JL
Barium	0.271	0.0200		mg/L	201743	1	01/16/2015 21:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 12:20:00 PM
Lab ID:	1501859-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:40	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/20/2015 19:47	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:40	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402S-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 2:30:00 PM
Lab ID:	1501859-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 17:32	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 17:32	NP
Surr: 4-Bromofluorobenzene	83.8	70.6-123		%REC	201805	1	01/16/2015 17:32	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	201805	1	01/16/2015 17:32	NP
Surr: Toluene-d8	98.2	81.3-120		%REC	201805	1	01/16/2015 17:32	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 15:13	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 15:13	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 15:13	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 15:13	YH
Surr: 4-Terphenyl-d14	96.6	55.4-136		%REC	201765	1	01/19/2015 15:13	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:20	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:44	JL
Barium	0.0777	0.0200		mg/L	201743	1	01/16/2015 21:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402S-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 2:30:00 PM
Lab ID:	1501859-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:44	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:44	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310BR-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:00:00 PM
Lab ID:	1501859-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 18:01	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 18:01	NP
Surr: 4-Bromofluorobenzene	79.6	70.6-123		%REC	201805	1	01/16/2015 18:01	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	201805	1	01/16/2015 18:01	NP
Surr: Toluene-d8	93.2	81.3-120		%REC	201805	1	01/16/2015 18:01	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	7.6	0.50		ug/L	201765	1	01/19/2015 15:39	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 15:39	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 15:39	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 15:39	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 15:39	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201765	1	01/19/2015 15:39	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:22	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:48	JL
Barium	0.142	0.0200		mg/L	201743	1	01/16/2015 21:48	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310BR-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:00:00 PM
Lab ID:	1501859-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:48	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:48	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:48	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:30:00 PM
Lab ID:	1501859-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201805	1	01/16/2015 18:30	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 18:30	NP
Surr: 4-Bromofluorobenzene	81.8	70.6-123		%REC	201805	1	01/16/2015 18:30	NP
Surr: Dibromofluoromethane	112	78.7-124		%REC	201805	1	01/16/2015 18:30	NP
Surr: Toluene-d8	99.1	81.3-120		%REC	201805	1	01/16/2015 18:30	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 12:39	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 12:39	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 12:39	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 12:39	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 12:39	YH
Surr: 4-Terphenyl-d14	61.1	55.4-136		%REC	201765	1	01/19/2015 12:39	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201823	1	01/19/2015 14:24	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Arsenic	BRL	0.0500		mg/L	201743	1	01/16/2015 21:52	JL
Barium	0.0705	0.0200		mg/L	201743	1	01/16/2015 21:52	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150112-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015 3:30:00 PM
Lab ID:	1501859-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Cadmium	BRL	0.0050		mg/L	201743	1	01/16/2015 21:52	JL
Chromium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Copper	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Lead	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Nickel	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Selenium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Thallium	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL
Vanadium	BRL	0.0100		mg/L	201743	1	01/16/2015 21:52	JL
Zinc	BRL	0.0200		mg/L	201743	1	01/16/2015 21:52	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 22-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/12/2015
Lab ID:	1501859-007	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/16/2015 15:35	NP
Benzene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Methylene chloride	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Toluene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Trichloroethene	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/16/2015 15:35	NP
Surr: 4-Bromofluorobenzene	77	70.6-123		%REC	201805	1	01/16/2015 15:35	NP
Surr: Dibromofluoromethane	108	78.7-124		%REC	201805	1	01/16/2015 15:35	NP
Surr: Toluene-d8	96.1	81.3-120		%REC	201805	1	01/16/2015 15:35	NP

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501859

Checklist completed by Ioana Pacurar 1/14/15
Signature Date

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

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

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

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

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

Cooler #1 3.1°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

Chain of custody agrees with sample labels? Yes ✓ +1D 1/14 No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? _____ Checked by David

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

1501859

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1501859-005D	SM4500	6	12	NaOH	19969	mL 9 Pellets	12	IP	1/14	3:35pm
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
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						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

DWM 8/22/2014 10:01 AM

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201743

Sample ID: **MB-201743** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018659**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201743** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018660**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9851	0.0200	1.000		98.5	80	120				
Arsenic	0.9794	0.0500	1.000		97.9	80	120				
Barium	0.9686	0.0200	1.000		96.9	80	120				
Beryllium	1.003	0.0100	1.000		100	80	120				
Cadmium	0.9856	0.0050	1.000		98.6	80	120				
Chromium	1.000	0.0100	1.000		100	80	120				
Copper	1.011	0.0100	1.000		101	80	120				
Lead	0.9590	0.0100	1.000		95.9	80	120				
Nickel	0.9614	0.0200	1.000		96.1	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201743

Sample ID: **LCS-201743** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018660**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Selenium	0.9606	0.0200	1.000		96.1	80	120				
Thallium	0.9843	0.0200	1.000		98.4	80	120				
Vanadium	0.9980	0.0100	1.000		99.8	80	120				
Zinc	0.9694	0.0200	1.000		96.9	80	120				

Sample ID: **1501744-001BMS** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018662**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9951	0.0200	1.000		99.5	75	125				
Arsenic	0.9949	0.0500	1.000		99.5	75	125				
Barium	0.9794	0.0200	1.000	0.009019	97.0	75	125				
Beryllium	1.010	0.0100	1.000		101	75	125				
Cadmium	0.9912	0.0050	1.000		99.1	75	125				
Chromium	1.009	0.0100	1.000	0.0009875	101	75	125				
Copper	1.027	0.0100	1.000		103	75	125				
Lead	0.9630	0.0100	1.000		96.3	75	125				
Nickel	0.9666	0.0200	1.000		96.7	75	125				
Selenium	0.9733	0.0200	1.000		97.3	75	125				
Thallium	0.9995	0.0200	1.000		99.9	75	125				
Vanadium	0.9871	0.0100	1.000	0.001583	98.6	75	125				
Zinc	0.9730	0.0200	1.000		97.3	75	125				

Sample ID: **1501744-001BMSD** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018663**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9901	0.0200	1.000		99.0	75	125	0.9951	0.510	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201743

Sample ID: **1501744-001BMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C**
Units: **mg/L** Prep Date: **01/16/2015** Run No: **283919**
BatchID: **201743** Analysis Date: **01/16/2015** Seq No: **6018663**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.9951	0.0500	1.000		99.5	75	125	0.9949	0.017	20	
Barium	0.9786	0.0200	1.000	0.009019	97.0	75	125	0.9794	0.082	20	
Beryllium	1.007	0.0100	1.000		101	75	125	1.010	0.346	20	
Cadmium	0.9922	0.0050	1.000		99.2	75	125	0.9912	0.096	20	
Chromium	1.007	0.0100	1.000	0.0009875	101	75	125	1.009	0.168	20	
Copper	1.024	0.0100	1.000		102	75	125	1.027	0.323	20	
Lead	0.9636	0.0100	1.000		96.4	75	125	0.9630	0.068	20	
Nickel	0.9649	0.0200	1.000		96.5	75	125	0.9666	0.183	20	
Selenium	0.9845	0.0200	1.000		98.4	75	125	0.9733	1.15	20	
Thallium	1.000	0.0200	1.000		100	75	125	0.9995	0.061	20	
Vanadium	0.9761	0.0100	1.000	0.001583	97.4	75	125	0.9871	1.12	20	
Zinc	0.9709	0.0200	1.000		97.1	75	125	0.9730	0.214	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201761

Sample ID: **MB-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013613**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013614**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2614	0.010	0.2500		105	90	110				

Sample ID: **1501857-004BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013637**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.03630	0.010	0.2500	0.006600	11.9	90	110				S

Sample ID: **1501923-001BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013635**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2302	0.010	0.2500		92.1	90	110				

Sample ID: **1501923-001BMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013636**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2317	0.010	0.2500		92.7	90	110	0.2302	0.649	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **MB-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017697**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.222	0	2.000		61.1	55.4	136				

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.704	0.50	2.000		85.2	66.3	118				
Acenaphthylene	1.533	1.0	2.000		76.6	64	120				
Anthracene	1.723	0.050	2.000		86.1	64.6	127				
Benz(a)anthracene	1.907	0.050	2.000		95.3	60.6	137				
Benzo(a)pyrene	1.718	0.050	2.000		85.9	64	124				
Benzo(b)fluoranthene	1.924	0.10	2.000		96.2	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.675	0.10	2.000	0.01532	83.0	49.9	137				
Benzo(k)fluoranthene	1.780	0.050	2.000		89.0	61.7	137				
Chrysene	1.890	0.050	2.000		94.5	65.5	127				
Dibenz(a,h)anthracene	1.797	0.10	2.000	0.01265	89.2	52.4	130				
Fluoranthene	2.067	0.10	2.000		103	67	131				
Fluorene	1.680	0.10	2.000		84.0	68.3	120				
Indeno(1,2,3-cd)pyrene	1.746	0.050	2.000	0.01214	86.7	50.4	139				
Naphthalene	1.660	0.50	2.000		83.0	61.1	120				
Phenanthrene	1.719	0.050	2.000	0.008850	85.5	68	119				
Pyrene	1.737	0.050	2.000		86.8	62	127				
Surr: 4-Terphenyl-d14	1.820	0	2.000		91.0	55.4	136				

Sample ID: **1501859-006BMS** Client ID: **MW-307D-20150112-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283969**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/18/2015** Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.664	0.50	2.000		83.2	45.6	120				
Acenaphthylene	1.760	1.0	2.000	0.01176	87.4	48.3	124				
Anthracene	1.916	0.050	2.000	0.02359	94.6	57.7	124				
Benz(a)anthracene	2.526	0.050	2.000		126	50.3	143				
Benzo(a)pyrene	1.657	0.050	2.000		82.9	44.2	127				
Benzo(b)fluoranthene	3.288	0.10	2.000		164	48.4	125				S
Benzo(g,h,i)perylene	1.665	0.10	2.000		83.2	40.2	122				
Benzo(k)fluoranthene	1.508	0.050	2.000		75.4	45.5	122				
Chrysene	1.717	0.050	2.000		85.9	46	124				
Dibenz(a,h)anthracene	1.993	0.10	2.000		99.7	40.1	128				
Fluoranthene	2.002	0.10	2.000	0.01522	99.3	58	127				
Fluorene	1.747	0.10	2.000	0.01972	86.4	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **1501859-006BMS**	Client ID: **MW-307D-20150112-01**			Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.991	0.050	2.000		99.5	40.3	129				
Naphthalene	1.643	0.50	2.000	0.02433	80.9	46.6	120				
Phenanthrene	1.697	0.050	2.000	0.01126	84.3	50.6	122				
Pyrene	1.799	0.050	2.000	0.04382	87.8	50.1	128				
Surr: 4-Terphenyl-d14	1.916	0	2.000		95.8	55.4	136				

Sample ID: **1501859-006BMSD**	Client ID: **MW-307D-20150112-01**			Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019921**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.829	0.50	2.000		91.5	45.6	120	1.664	9.44	29.4	
Acenaphthylene	1.943	1.0	2.000	0.01176	96.6	48.3	124	1.760	9.89	32.5	
Anthracene	2.068	0.050	2.000	0.02359	102	57.7	124	1.916	7.63	21.9	
Benz(a)anthracene	2.738	0.050	2.000		137	50.3	143	2.526	8.06	26.8	
Benzo(a)pyrene	1.776	0.050	2.000		88.8	44.2	127	1.657	6.92	40.9	
Benzo(b)fluoranthene	3.674	0.10	2.000		184	48.4	125	3.288	11.1	24.2	S
Benzo(g,h,i)perylene	1.799	0.10	2.000		90.0	40.2	122	1.665	7.77	26.2	
Benzo(k)fluoranthene	1.620	0.050	2.000		81.0	45.5	122	1.508	7.10	23.3	
Chrysene	1.880	0.050	2.000		94.0	46	124	1.717	9.06	25	
Dibenz(a,h)anthracene	2.135	0.10	2.000		107	40.1	128	1.993	6.88	23.6	
Fluoranthene	2.173	0.10	2.000	0.01522	108	58	127	2.002	8.22	23.5	
Fluorene	1.928	0.10	2.000	0.01972	95.4	52.6	124	1.747	9.84	31.5	
Indeno(1,2,3-cd)pyrene	2.131	0.050	2.000		107	40.3	129	1.991	6.82	28.8	
Naphthalene	1.788	0.50	2.000	0.02433	88.2	46.6	120	1.643	8.47	22.9	
Phenanthrene	1.867	0.050	2.000	0.01126	92.8	50.6	122	1.697	9.54	20.2	
Pyrene	1.962	0.050	2.000	0.04382	95.9	50.1	128	1.799	8.65	24.7	
Surr: 4-Terphenyl-d14	2.060	0	2.000		103	55.4	136	1.916	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **MB-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014981**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	42.70	0	50.00		85.4	70.6	123				
Surr: Dibromofluoromethane	54.98	0	50.00		110	78.7	124				
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120				

Sample ID: **LCS-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.66	5.0	50.00		93.3	72.8	128				
Toluene	46.50	5.0	50.00		93.0	74.9	127				
Trichloroethene	49.63	5.0	50.00		99.3	70.5	134				
Surr: 4-Bromofluorobenzene	40.51	0	50.00		81.0	70.6	123				
Surr: Dibromofluoromethane	50.05	0	50.00		100	78.7	124				
Surr: Toluene-d8	46.15	0	50.00		92.3	81.3	120				

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.43	5.0	50.00		105	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	51.66	5.0	50.00		103	70.5	137				
Trichloroethene	52.57	5.0	50.00		105	71.8	139				
Surr: 4-Bromofluorobenzene	37.51	0	50.00		75.0	70.6	123				
Surr: Dibromofluoromethane	48.86	0	50.00		97.7	78.7	124				
Surr: Toluene-d8	47.61	0	50.00		95.2	81.3	120				

Sample ID: **1501934-001AMSD** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016674**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	53.44	5.0	50.00		107	70	135	52.43	1.91	20	
Toluene	52.74	5.0	50.00		105	70.5	137	51.66	2.07	20	
Trichloroethene	53.90	5.0	50.00		108	71.8	139	52.57	2.50	20	
Surr: 4-Bromofluorobenzene	37.47	0	50.00		74.9	70.6	123	37.51	0	0	
Surr: Dibromofluoromethane	49.24	0	50.00		98.5	78.7	124	48.86	0	0	
Surr: Toluene-d8	45.13	0	50.00		90.3	81.3	120	47.61	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501859

ANALYTICAL QC SUMMARY REPORT

BatchID: 201823

Sample ID: **MB-201823**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017651**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201823**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017652**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005081	0.00020	0.0050		102	80	120				

Sample ID: **1501859-001CMS**	Client ID: **MW-21-20150112-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017656**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.003917	0.00020	0.0050		78.3	70	130				

Sample ID: **1501859-001CMSD**	Client ID: **MW-21-20150112-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283881**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**			BatchID: **201823**	Analysis Date: **01/19/2015**	Seq No: **6017657**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.003865	0.00020	0.0050		77.3	70	130	0.003917	1.33	20	

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 23, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1501895

Analytical Environmental Services, Inc. received 22 samples on 1/14/2015 11:51:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501495

Date: 01/15/2015 Page 1 of 2

COMPANY: ENVIRONMENTAL RESOURCES MANAGEMENT

ADDRESS: 3200 WINDY HILL RD SE SUITE 1500 W ATLANTA, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: C.BROOKS, R.MAYETTE, A.NEAL, A.SHOREDITS, W.VIRGO

SIGNATURE:

ANALYSIS REQUESTED

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

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	REMARKS	No # of Containers
1	MW-321-20150113-01	01-13-15	08:50	X		GW	H		6
2	MW-325-20150113-01	"	09:05						6
3	MW-602-20150113-01	"	09:05						6
4	MW-306D-20150113-01	"	09:20						6
5	MW-324-20150113-01	"	10:20						6
6	MW-213-20150113-01	"	11:20						6
7	MW-608DR-20150113-01 DD	"	11:30						6
8	MW-307SAP-20150113-01	"	11:40						6
9	MW-306TZ-20150113-01	"	11:40						6
10	MW-202DR-20150113-01	"	12:25				Z	An extra 250ml bottle	11
11	MW-214-20150113-01	"	12:25					"	11
12	MW-602P-20150113-01	"	14:30					"	11
13	MW-305-20150113-01	"	15:00					"	11
14	MW-303-20150113-01	"	15:05	✓		✓	✓		10

PRESERVATION (See codes): H = HCl; NA = NaOH; N = HNO3; NaOH = NaOH; NA = NaOH; NA = NaOH; NA = NaOH

RELINQUISHED BY / DATE/TIME

1: 01/14/2015

2: 01-14-2015 11:51 AM

3:

RECEIVED BY / DATE/TIME

1: 01-14-2015 9:12AM

2: Latoya Reeves 1/14/15 11:51 a

3:

PROJECT INFORMATION

PROJECT NAME: AGLC AUGUSTA

PROJECT #: 0230712.52

SITE ADDRESS: 612 5th St. AUGUSTA, GA 30901

SEND REPORT TO: srs-grak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 108

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

STATE PROGRAM (if any):

E-mail? (Y)/N: Fax? Y/N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER

GREYHOUND OTHER

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

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

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

White Copy - Original; Yellow Copy - Client

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3080 Presidential Drive, Atlanta GA 30340-3704

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CHAIN OF CUSTODY

Work Order: 1501895

Date: 01/13/2015 Page 2 of 2

COMPANY: ENVIRONMENTAL RESOURCES MANAGEMENT

ADDRESS: 3200 WENDY HILL RD SE SUITE 150 W ATLANTA, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: C. BROOKS, R. MAYETTE, A. NEAL, A. SHOREDITS, M. VIDRIO

SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC (SW8260B)	SVOC (8270C)	TOT METALS (6010B, 7470A, 7471A)	CYANIDE (9012A)	6PBBS PSK-175	SULFATE (9056)	FERROUS Fe (SM3500)	CO2 + 02	REMARKS	No # of Containers
	PRESERVATION (See codes)						H	NA	N	NaOH	NA	NA	NA	NA		
1	MW-22-20150113-01	01-13-15	15:55	X		GW	2	2	1	1	2	1	1	1	An extra 250ml bottle	11
2	MW-31-OSRP-20150113-01	"	16:15												"	11
3	MW-33-20150113-01	"	16:17												"	11
4	MW-309BR-20150113-01	"	17:35													10
5	DUP-01-20150113-01	"	—													6 NR
6	DUP-02-20150113-01	"	—													11
7	TB-01	NA	—			W									5 coolers; 2 u. VOCs	2
8	TB-02	NA	—			W										2
9																
10																
11																
12																
15																
14																

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/14/2015 9:11	1:	01-14-2015 9:11 AM
2:	01-14-2015 11:51AM	2:	Cataya Reeves 1/14/15 11:51
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AALC Augusta

PROJECT #: 0230712.52

SITE ADDRESS: 812 8th St Augusta, GA 30901

SEND REPORT TO: sreagin-irale@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 64

Turnaround Time Request

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

STATE PROGRAM (if any):

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

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL (COURIER)

GREYHOUND OTHER

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

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

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

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1501895

Case Narrative

Sample Receiving Nonconformance:

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. All G fraction samples were analyzed in the laboratory which is a deviation from the method.

Sample ID "DUP-02-20150113-01" is reporting with an H-Flag since there is no collection time on the COC.

PAH Analysis by Method 8270D SIM:

Due to sample matrix, samples 1501895-006B, -009B required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-321-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 8:50:00 AM
Lab ID:	1501895-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 20:43	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 20:43	GK
Surr: 4-Bromofluorobenzene	93.8	70.6-123		%REC	201848	1	01/17/2015 20:43	GK
Surr: Dibromofluoromethane	98.5	78.7-124		%REC	201848	1	01/17/2015 20:43	GK
Surr: Toluene-d8	96.7	81.3-120		%REC	201848	1	01/17/2015 20:43	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.7	0.50		ug/L	201765	1	01/19/2015 16:04	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 16:04	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 16:04	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 16:04	YH
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201765	1	01/19/2015 16:04	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:06	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:35	JL
Barium	0.0606	0.0200		mg/L	201578	1	01/16/2015 22:35	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-321-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 8:50:00 AM
Lab ID:	1501895-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:35	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:35	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 22:35	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-325-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 22:13	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 22:13	GK
Surr: 4-Bromofluorobenzene	94.6	70.6-123		%REC	201848	1	01/17/2015 22:13	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201848	1	01/17/2015 22:13	GK
Surr: Toluene-d8	97.5	81.3-120		%REC	201848	1	01/17/2015 22:13	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 16:31	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 16:31	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 16:31	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:31	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 16:31	YH
Surr: 4-Terphenyl-d14	106	55.4-136		%REC	201765	1	01/19/2015 16:31	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:14	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:39	JL
Barium	0.0553	0.0200		mg/L	201578	1	01/16/2015 22:39	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-325-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Cadmium	0.0090	0.0050		mg/L	201578	1	01/16/2015 22:39	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:39	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:39	JL
Zinc	0.0573	0.0200		mg/L	201578	1	01/16/2015 22:39	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-602-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 22:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 22:42	GK
Surr: 4-Bromofluorobenzene	94	70.6-123		%REC	201848	1	01/17/2015 22:42	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/17/2015 22:42	GK
Surr: Toluene-d8	97.5	81.3-120		%REC	201848	1	01/17/2015 22:42	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 16:57	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 16:57	YH
Acenaphthene	1.6	0.50		ug/L	201765	1	01/19/2015 16:57	YH
Fluorene	0.22	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Anthracene	0.10	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 16:57	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 16:57	YH
Surr: 4-Terphenyl-d14	99	55.4-136		%REC	201765	1	01/19/2015 16:57	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:20	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:43	JL
Barium	0.491	0.0200		mg/L	201578	1	01/16/2015 22:43	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-602-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:05:00 AM
Lab ID:	1501895-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:43	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Copper	0.0221	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:43	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:43	JL
Zinc	0.165	0.0200		mg/L	201578	1	01/16/2015 22:43	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:20:00 AM
Lab ID:	1501895-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 23:12	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 23:12	GK
Surr: 4-Bromofluorobenzene	93.3	70.6-123		%REC	201848	1	01/17/2015 23:12	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/17/2015 23:12	GK
Surr: Toluene-d8	96.7	81.3-120		%REC	201848	1	01/17/2015 23:12	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 13:04	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 13:04	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 13:04	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 13:04	YH
Surr: 4-Terphenyl-d14	97.4	55.4-136		%REC	201765	1	01/19/2015 13:04	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:22	JG
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:53	JL
Barium	0.377	0.0200		mg/L	201578	1	01/16/2015 22:53	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 9:20:00 AM
Lab ID:	1501895-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:53	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:53	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 22:53	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-324-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 10:20:00 AM
Lab ID:	1501895-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/17/2015 23:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/17/2015 23:42	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201848	1	01/17/2015 23:42	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/17/2015 23:42	GK
Surr: Toluene-d8	97.6	81.3-120		%REC	201848	1	01/17/2015 23:42	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.3	0.50		ug/L	201765	1	01/18/2015 17:11	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 17:11	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 17:11	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 17:11	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 17:11	RS
Surr: 4-Terphenyl-d14	91.8	55.4-136		%REC	201765	1	01/18/2015 17:11	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:24	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:57	JL
Barium	0.0232	0.0200		mg/L	201578	1	01/16/2015 22:57	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-324-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 10:20:00 AM
Lab ID:	1501895-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:57	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:57	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:57	JL
Zinc	0.0205	0.0200		mg/L	201578	1	01/16/2015 22:57	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-213-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:20:00 AM
Lab ID:	1501895-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 00:12	GK
Benzene	8900	250		ug/L	201848	50	01/19/2015 14:06	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 00:12	GK
Ethylbenzene	1500	250		ug/L	201848	50	01/19/2015 14:06	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 00:12	GK
Toluene	460	250		ug/L	201848	50	01/19/2015 14:06	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 00:12	GK
Xylenes, Total	1300	250		ug/L	201848	50	01/19/2015 14:06	GK
Surr: 4-Bromofluorobenzene	96.7	70.6-123		%REC	201848	50	01/19/2015 14:06	GK
Surr: 4-Bromofluorobenzene	99	70.6-123		%REC	201848	1	01/18/2015 00:12	GK
Surr: Dibromofluoromethane	95.9	78.7-124		%REC	201848	50	01/19/2015 14:06	GK
Surr: Dibromofluoromethane	97.9	78.7-124		%REC	201848	1	01/18/2015 00:12	GK
Surr: Toluene-d8	95.1	81.3-120		%REC	201848	50	01/19/2015 14:06	GK
Surr: Toluene-d8	95.8	81.3-120		%REC	201848	1	01/18/2015 00:12	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	0.014	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	14000	5000		ug/L	201765	10000	01/22/2015 14:26	YH
Acenaphthylene	180	100		ug/L	201765	100	01/21/2015 18:56	YH
Acenaphthene	180	50		ug/L	201765	100	01/21/2015 18:56	YH
Fluorene	51	1.0		ug/L	201765	10	01/20/2015 15:36	YH
Phenanthrene	52	0.50		ug/L	201765	10	01/20/2015 15:36	YH
Anthracene	7.9	0.50		ug/L	201765	10	01/20/2015 15:36	YH
Fluoranthene	1.3	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Pyrene	1.3	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Benz(a)anthracene	BRL	0.50		ug/L	201765	10	01/20/2015 15:36	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 14:13	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 14:13	RS
Surr: 4-Terphenyl-d14	187	55.4-136	S	%REC	201765	1	01/18/2015 14:13	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:26	JG
METALS, TOTAL SW6010C				(SW3010A)				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-213-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:20:00 AM
Lab ID:	1501895-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:00	JL
Barium	0.927	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:00	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:00	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:00	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:30:00 AM
Lab ID:	1501895-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 00:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 00:42	GK
Surr: 4-Bromofluorobenzene	97	70.6-123		%REC	201848	1	01/18/2015 00:42	GK
Surr: Dibromofluoromethane	97.2	78.7-124		%REC	201848	1	01/18/2015 00:42	GK
Surr: Toluene-d8	96.4	81.3-120		%REC	201848	1	01/18/2015 00:42	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 13:30	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 13:30	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 13:30	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:30	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 13:30	YH
Surr: 4-Terphenyl-d14	91.6	55.4-136		%REC	201765	1	01/19/2015 13:30	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:28	JG
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL
Arsenic	0.429	0.0500		mg/L	201578	1	01/16/2015 23:04	JL
Barium	0.448	0.0200		mg/L	201578	1	01/16/2015 23:04	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:30:00 AM
Lab ID:	1501895-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:04	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/21/2015 20:04	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:04	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:04	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 01:12	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 01:12	GK
Surr: 4-Bromofluorobenzene	94.1	70.6-123		%REC	201848	1	01/18/2015 01:12	GK
Surr: Dibromofluoromethane	97.5	78.7-124		%REC	201848	1	01/18/2015 01:12	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201848	1	01/18/2015 01:12	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/19/2015 13:56	YH
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/19/2015 13:56	YH
Acenaphthene	BRL	0.50		ug/L	201765	1	01/19/2015 13:56	YH
Fluorene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Phenanthrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Chrysene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/19/2015 13:56	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/19/2015 13:56	YH
Surr: 4-Terphenyl-d14	101	55.4-136		%REC	201765	1	01/19/2015 13:56	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:30	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:08	JL
Barium	0.0649	0.0200		mg/L	201578	1	01/16/2015 23:08	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:08	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:08	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:08	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306TZ-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 01:42	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Xylenes, Total	6.8	5.0		ug/L	201848	1	01/18/2015 01:42	GK
Surr: 4-Bromofluorobenzene	98.1	70.6-123		%REC	201848	1	01/18/2015 01:42	GK
Surr: Dibromofluoromethane	98.5	78.7-124		%REC	201848	1	01/18/2015 01:42	GK
Surr: Toluene-d8	97	81.3-120		%REC	201848	1	01/18/2015 01:42	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201761	1	01/15/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	240	50		ug/L	201765	100	01/21/2015 19:24	YH
Acenaphthylene	BRL	10		ug/L	201765	10	01/20/2015 16:02	YH
Acenaphthene	18	5.0		ug/L	201765	10	01/20/2015 16:02	YH
Fluorene	2.0	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Phenanthrene	0.95	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Anthracene	0.25	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Fluoranthene	0.12	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Pyrene	0.11	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:27	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 18:27	RS
Surr: 4-Terphenyl-d14	95.3	55.4-136		%REC	201765	1	01/18/2015 18:27	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:32	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:12	JL
Barium	0.735	0.0200		mg/L	201578	1	01/16/2015 23:12	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306TZ-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 11:40:00 AM
Lab ID:	1501895-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:12	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:12	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:12	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-202DR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 02:12	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 02:12	GK
Surr: 4-Bromofluorobenzene	96.3	70.6-123		%REC	201848	1	01/18/2015 02:12	GK
Surr: Dibromofluoromethane	98.9	78.7-124		%REC	201848	1	01/18/2015 02:12	GK
Surr: Toluene-d8	96.8	81.3-120		%REC	201848	1	01/18/2015 02:12	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	2.7	0.50		ug/L	201765	1	01/18/2015 18:53	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 18:53	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 18:53	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 18:53	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 18:53	RS
Surr: 4-Terphenyl-d14	93.9	55.4-136		%REC	201765	1	01/18/2015 18:53	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:34	JG
ION SCAN SW9056A								
Nitrate	0.31	0.25		mg/L	R283852	1	01/14/2015 16:49	JW
Sulfate	56	1.0		mg/L	R283852	1	01/14/2015 16:49	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-202DR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 17:52	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.27	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	196	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:16	JL
Barium	0.0536	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:16	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:16	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:16	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-214-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 02:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 02:41	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	201848	1	01/18/2015 02:41	GK
Surr: Dibromofluoromethane	99.3	78.7-124		%REC	201848	1	01/18/2015 02:41	GK
Surr: Toluene-d8	97.4	81.3-120		%REC	201848	1	01/18/2015 02:41	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 19:19	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 19:19	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 19:19	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:19	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 19:19	RS
Surr: 4-Terphenyl-d14	97.5	55.4-136		%REC	201765	1	01/18/2015 19:19	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:36	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 17:04	JW
Sulfate	BRL	1.0		mg/L	R283852	1	01/14/2015 17:04	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-214-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:25:00 PM
Lab ID:	1501895-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	410	20		ug/L	201752	5	01/15/2015 19:15	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	2.56	1.00		mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.17	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	108	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:19	JL
Barium	0.338	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:19	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:19	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:19	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:30:00 PM
Lab ID:	1501895-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 03:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 03:11	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201848	1	01/18/2015 03:11	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201848	1	01/18/2015 03:11	GK
Surr: Toluene-d8	97.1	81.3-120		%REC	201848	1	01/18/2015 03:11	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 19:46	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 19:46	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 19:46	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 19:46	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 19:46	RS
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201765	1	01/18/2015 19:46	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:38	JG
ION SCAN SW9056A								
Nitrate	1.5	0.25		mg/L	R283852	1	01/14/2015 17:19	JW
Sulfate	56	1.0		mg/L	R283852	1	01/14/2015 17:19	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-402D-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 2:30:00 PM
Lab ID:	1501895-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 18:02	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.79	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	144	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:23	JL
Barium	0.0768	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:23	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:23	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:23	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-315-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:00:00 PM
Lab ID:	1501895-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 03:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 03:41	GK
Surr: 4-Bromofluorobenzene	95.8	70.6-123		%REC	201848	1	01/18/2015 03:41	GK
Surr: Dibromofluoromethane	98.9	78.7-124		%REC	201848	1	01/18/2015 03:41	GK
Surr: Toluene-d8	97.2	81.3-120		%REC	201848	1	01/18/2015 03:41	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 20:12	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 20:12	RS
Acenaphthene	0.56	0.50		ug/L	201765	1	01/18/2015 20:12	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:12	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 20:12	RS
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201765	1	01/18/2015 20:12	RS
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:43	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 18:17	JW
Sulfate	5.5	1.0		mg/L	R283852	1	01/14/2015 18:17	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-315-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:00:00 PM
Lab ID:	1501895-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	60	4		ug/L	201752	1	01/15/2015 18:07	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.36	1.00		mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.68	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	77.9	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:27	JL
Barium	0.455	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:27	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:27	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:27	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-303-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:05:00 PM
Lab ID:	1501895-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 04:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 04:11	GK
Surr: 4-Bromofluorobenzene	95.2	70.6-123		%REC	201848	1	01/18/2015 04:11	GK
Surr: Dibromofluoromethane	99.1	78.7-124		%REC	201848	1	01/18/2015 04:11	GK
Surr: Toluene-d8	96	81.3-120		%REC	201848	1	01/18/2015 04:11	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201765	1	01/18/2015 20:39	RS
Acenaphthylene	BRL	1.0		ug/L	201765	1	01/18/2015 20:39	RS
Acenaphthene	BRL	0.50		ug/L	201765	1	01/18/2015 20:39	RS
Fluorene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Phenanthrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Anthracene	0.087	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Fluoranthene	0.11	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Pyrene	0.11	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Benz(a)anthracene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Chrysene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(b)fluoranthene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(k)fluoranthene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(a)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201765	1	01/18/2015 20:39	RS
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201765	1	01/18/2015 20:39	RS
Surr: 4-Terphenyl-d14	95.4	55.4-136		%REC	201765	1	01/18/2015 20:39	RS
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:45	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 18:32	JW
Sulfate	BRL	1.0		mg/L	R283852	1	01/14/2015 18:32	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-303-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:05:00 PM
Lab ID:	1501895-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	150	4		ug/L	201752	1	01/15/2015 18:12	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.83	1.00		mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.89	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	168	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:37	JL
Barium	0.0888	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:37	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:37	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:37	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-22-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:55:00 PM
Lab ID:	1501895-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 04:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 04:41	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201848	1	01/18/2015 04:41	GK
Surr: Dibromofluoromethane	99.5	78.7-124		%REC	201848	1	01/18/2015 04:41	GK
Surr: Toluene-d8	97	81.3-120		%REC	201848	1	01/18/2015 04:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	2.8	0.50		ug/L	201771	1	01/18/2015 16:13	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 16:13	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 16:13	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 16:13	YH
Surr: 4-Terphenyl-d14	94.6	55.4-136		%REC	201771	1	01/18/2015 16:13	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:47	JG
ION SCAN SW9056A								
Nitrate	0.63	0.25		mg/L	R283852	1	01/14/2015 18:47	JW
Sulfate	24	1.0		mg/L	R283852	1	01/14/2015 18:47	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-22-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 3:55:00 PM
Lab ID:	1501895-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 18:17	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.02	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	59.7	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:41	JL
Barium	0.0300	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:41	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:41	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:41	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:15:00 PM
Lab ID:	1501895-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 05:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 05:11	GK
Surr: 4-Bromofluorobenzene	96	70.6-123		%REC	201848	1	01/18/2015 05:11	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/18/2015 05:11	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201848	1	01/18/2015 05:11	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 16:38	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 16:38	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 16:38	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 16:38	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 16:38	YH
Surr: 4-Terphenyl-d14	97.8	55.4-136		%REC	201771	1	01/18/2015 16:38	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:49	JG
ION SCAN SW9056A								
Nitrate	9.8	0.25		mg/L	R283852	1	01/14/2015 19:02	JW
Sulfate	24	1.0		mg/L	R283852	1	01/14/2015 19:02	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-310SAP-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:15:00 PM
Lab ID:	1501895-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175					**(RSK175)**			
Methane	BRL	4		ug/L	201752	1	01/15/2015 18:22	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.96	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	61.1	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C					**(SW3010A)**			
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:45	JL
Barium	0.0749	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:45	JL
Chromium	0.0117	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Nickel	0.336	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:45	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:45	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-313-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:17:00 PM
Lab ID:	1501895-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 05:40	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 05:40	GK
Surr: 4-Bromofluorobenzene	93.7	70.6-123		%REC	201848	1	01/18/2015 05:40	GK
Surr: Dibromofluoromethane	99.6	78.7-124		%REC	201848	1	01/18/2015 05:40	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201848	1	01/18/2015 05:40	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 17:03	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 17:03	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 17:03	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:03	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 17:03	YH
Surr: 4-Terphenyl-d14	98.8	55.4-136		%REC	201771	1	01/18/2015 17:03	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:51	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 19:16	JW
Sulfate	1.1	1.0		mg/L	R283852	1	01/14/2015 19:16	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-313-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 4:17:00 PM
Lab ID:	1501895-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	240	8		ug/L	201752	2	01/15/2015 19:19	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.42	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	73.8	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:49	JL
Barium	0.141	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:49	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:49	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:49	JL
Zinc	0.0564	0.0200		mg/L	201578	1	01/16/2015 23:49	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 5:35:00 PM
Lab ID:	1501895-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 06:11	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 06:11	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201848	1	01/18/2015 06:11	GK
Surr: Dibromofluoromethane	99.8	78.7-124		%REC	201848	1	01/18/2015 06:11	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201848	1	01/18/2015 06:11	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 17:28	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 17:28	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 17:28	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:28	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 17:28	YH
Surr: 4-Terphenyl-d14	101	55.4-136		%REC	201771	1	01/18/2015 17:28	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:53	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 19:31	JW
Sulfate	1.7	1.0		mg/L	R283852	1	01/14/2015 19:31	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015 5:35:00 PM
Lab ID:	1501895-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	500	20		ug/L	201752	5	01/15/2015 19:24	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.188	0.100		mg/L	R283659	1	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.21	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	104	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:52	JL
Barium	0.410	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Cadmium	0.0073	0.0050		mg/L	201578	1	01/16/2015 23:52	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Copper	0.0214	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:52	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:52	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-01-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 06:41	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Xylenes, Total	6.3	5.0		ug/L	201848	1	01/18/2015 06:41	GK
Surr: 4-Bromofluorobenzene	98.2	70.6-123		%REC	201848	1	01/18/2015 06:41	GK
Surr: Dibromofluoromethane	98.9	78.7-124		%REC	201848	1	01/18/2015 06:41	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201848	1	01/18/2015 06:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	300	50		ug/L	201771	100	01/19/2015 23:54	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 17:53	YH
Acenaphthene	21	5.0		ug/L	201771	10	01/19/2015 17:23	YH
Fluorene	2.2	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Phenanthrene	1.1	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Anthracene	0.25	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Fluoranthene	0.13	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Pyrene	0.12	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 17:53	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 17:53	YH
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201771	1	01/18/2015 17:53	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:55	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 23:56	JL
Barium	0.741	0.0200		mg/L	201578	1	01/16/2015 23:56	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-01-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 23:56	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 23:56	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 23:56	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-02-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201848	1	01/18/2015 07:10	GK
Benzene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Carbon disulfide	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Ethylbenzene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Methylene chloride	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Toluene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Trichloroethene	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Xylenes, Total	BRL	5.0		ug/L	201848	1	01/18/2015 07:10	GK
Surr: 4-Bromofluorobenzene	93.9	70.6-123		%REC	201848	1	01/18/2015 07:10	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201848	1	01/18/2015 07:10	GK
Surr: Toluene-d8	98	81.3-120		%REC	201848	1	01/18/2015 07:10	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 18:18	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 18:18	YH
Acenaphthene	0.65	0.50		ug/L	201771	1	01/18/2015 18:18	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:18	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 18:18	YH
Surr: 4-Terphenyl-d14	103	55.4-136		%REC	201771	1	01/18/2015 18:18	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201824	1	01/19/2015 15:57	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283852	1	01/14/2015 19:46	JW
Sulfate	4.9	1.0		mg/L	R283852	1	01/14/2015 19:46	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-02-20150113-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175					**(RSK175)**			
Methane	57	4		ug/L	201752	1	01/15/2015 18:50	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.53	1.00	H	mg/L	R283659	10	01/14/2015 12:21	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.01	1.00	H	mg/L	R283916	1	01/19/2015 17:30	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	69.2	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C					**(SW3010A)**			
Antimony	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Arsenic	BRL	0.0500		mg/L	201578	1	01/16/2015 22:16	JL
Barium	0.459	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Beryllium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Cadmium	BRL	0.0050		mg/L	201578	1	01/16/2015 22:16	JL
Chromium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Copper	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Lead	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Nickel	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Selenium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Thallium	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL
Vanadium	BRL	0.0100		mg/L	201578	1	01/16/2015 22:16	JL
Zinc	BRL	0.0200		mg/L	201578	1	01/16/2015 22:16	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-021	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/19/2015 15:05	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 15:05	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201805	1	01/19/2015 15:05	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201805	1	01/19/2015 15:05	GK
Surr: Toluene-d8	97.6	81.3-120		%REC	201805	1	01/19/2015 15:05	GK

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 23-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-02
Project Name:	AGLC Augusta Effluent	**Collection Date:**	1/13/2015
Lab ID:	1501895-022	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/19/2015 15:35	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 15:35	GK
Surr: 4-Bromofluorobenzene	94.9	70.6-123		%REC	201805	1	01/19/2015 15:35	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201805	1	01/19/2015 15:35	GK
Surr: Toluene-d8	97.6	81.3-120		%REC	201805	1	01/19/2015 15:35	GK

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501895

Checklist completed by Signature Iana Paewar Date 1/14/15

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

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

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

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

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

Cooler #1 3.1°C Cooler #2 3.2°C Cooler #3 3.5°C Cooler #4 3.1°C Cooler#5 3.4°C Cooler #6 _____

Chain of custody present? Yes ✓ No __

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

Chain of custody agrees with sample labels? Yes ✓ No ✓ MM 1/15/15

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ MM 1/15/15 No ✓

Was TAT marked on the COC? Yes ✓ No __

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

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

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

Adjusted? Iana Checked by Dawn

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-001A	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-001B	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-001C	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-001C	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-001D	MW-321-20150113-01	1/13/2015 8:50:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-002A	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-002B	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-002C	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-002C	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-002D	MW-325-20150113-01	1/13/2015 9:05:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-003A	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-003B	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-003C	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-003C	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-003D	MW-602-20150113-01	1/13/2015 9:05:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-004A	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-004B	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-004C	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-004C	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-004D	MW-306D-20150113-01	1/13/2015 9:20:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-005A	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/17/2015
1501895-005B	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-005C	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-005C	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-005D	MW-324-20150113-01	1/13/2015 10:20:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-006A	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-006A	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/19/2015
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/21/2015
1501895-006B	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/22/2015
1501895-006C	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-006C	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-006D	MW-213-20150113-01	1/13/2015 11:20:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-007A	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-007B	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-007C	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-007C	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/21/2015
1501895-007C	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-007D	MW-408D-20150113-01	1/13/2015 11:30:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-008A	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-008B	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/19/2015
1501895-008C	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-008C	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-008D	MW-307SAP-20150113-01	1/13/2015 11:40:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-009A	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-009B	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-009B	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/20/2015
1501895-009B	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/21/2015
1501895-009C	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-009C	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-009D	MW-306TZ-20150113-01	1/13/2015 11:40:00AM	Groundwater	Total Cyanide		1/15/2015 10:30:00AM	01/15/2015
1501895-010A	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-010B	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-010C	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-010D	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-010D	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-010E	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-010F	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	ION SCAN			01/14/2015
1501895-010G	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-010H	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015
1501895-010H	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-010H	MW-202DR-20150113-01	1/13/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-011A	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-011B	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-011C	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-011D	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-011D	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-011E	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-011F	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	ION SCAN			01/14/2015
1501895-011G	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-011H	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015
1501895-011H	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-011H	MW214-20150113-01	1/13/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-012A	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-012B	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-012C	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-012D	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-012D	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-012E	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-012F	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	ION SCAN			01/14/2015
1501895-012G	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-012H	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Alkalinity			01/20/2015
1501895-012H	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-012H	MW-402D-20150113-01	1/13/2015 2:30:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-013A	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-013B	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-013C	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-013D	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-013D	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-013E	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-013F	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	ION SCAN			01/14/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Alkalinity			01/20/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-013G	MW-315-20150113-01	1/13/2015 3:00:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-014A	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-014B	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-014C	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 11:00:00AM	01/18/2015
1501895-014D	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-014D	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-014E	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-014F	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	ION SCAN			01/14/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Alkalinity			01/20/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-014G	MW-303-20150113-01	1/13/2015 3:05:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-015A	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-015B	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-015C	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-015D	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-015D	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-015E	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-015F	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	ION SCAN			01/14/2015
1501895-015G	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-015H	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Alkalinity			01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-015H	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-015H	MW-22-20150113-01	1/13/2015 3:55:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-016A	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-016B	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-016C	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-016D	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-016D	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-016E	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-016F	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	ION SCAN			01/14/2015
1501895-016G	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-016H	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Alkalinity			01/20/2015
1501895-016H	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-016H	MW-310SAP-20150113-01	1/13/2015 4:15:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-017A	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-017B	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-017C	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-017D	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-017D	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-017E	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-017F	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	ION SCAN			01/14/2015
1501895-017G	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-017H	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Alkalinity			01/20/2015
1501895-017H	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-017H	MW-313-20150113-01	1/13/2015 4:17:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-018A	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-018B	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-018C	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-018D	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-018D	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1501895

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501895-018E	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-018F	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	ION SCAN			01/14/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Alkalinity			01/20/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Ferrous Iron			01/14/2015
1501895-018G	MW-309BR-20150113-01	1/13/2015 5:35:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-019A	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-019B	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-019B	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/19/2015
1501895-019C	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-019C	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-019D	DUP-01-20150113-01	1/13/2015 12:00:00AM	Groundwater	Total Cyanide		1/15/2015 2:40:00PM	01/16/2015
1501895-020A	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/17/2015 7:43:00PM	01/18/2015
1501895-020B	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08PM	01/15/2015
1501895-020C	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00PM	01/18/2015
1501895-020D	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/16/2015 11:15:00AM	01/16/2015
1501895-020D	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/19/2015 9:25:00AM	01/19/2015
1501895-020E	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00AM	01/16/2015
1501895-020F	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	ION SCAN			01/14/2015
1501895-020G	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Ferrous Iron			01/14/2015
1501895-020H	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Alkalinity			01/20/2015
1501895-020H	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/19/2015
1501895-020H	DUP-02-20150113-01	1/13/2015 12:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501895-021A	TB-01	1/13/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:41:00AM	01/19/2015
1501895-022A	TB-02	1/13/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:41:00AM	01/19/2015

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

1501895

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1501895-003D	SM4500	6	12	NaOH	19969	mL 9 Pellets	12	IP	1/14	4:42
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
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						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201578

Sample ID: **MB-201578** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018406**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201578** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018407**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9899	0.0200	1.000		99.0	80	120				
Arsenic	0.9800	0.0500	1.000		98.0	80	120				
Barium	0.9615	0.0200	1.000		96.1	80	120				
Beryllium	1.005	0.0100	1.000		100	80	120				
Cadmium	0.9900	0.0050	1.000		99.0	80	120				
Chromium	0.9878	0.0100	1.000		98.8	80	120				
Copper	1.020	0.0100	1.000		102	80	120				
Lead	0.9481	0.0100	1.000		94.8	80	120				
Nickel	0.9584	0.0200	1.000		95.8	80	120				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201578

Sample ID: **LCS-201578** Client ID: Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018407**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Selenium	0.9668	0.0200	1.000		96.7	80	120				
Thallium	0.9889	0.0200	1.000		98.9	80	120				
Vanadium	0.9748	0.0100	1.000		97.5	80	120				
Zinc	0.9572	0.0200	1.000		95.7	80	120				

Sample ID: **1501895-020DMS** Client ID: **DUP-02-20150113-01** Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9491	0.0200	1.000		94.9	75	125				
Arsenic	0.9564	0.0500	1.000		95.6	75	125				
Barium	1.382	0.0200	1.000	0.4593	92.3	75	125				
Beryllium	0.9616	0.0100	1.000		96.2	75	125				
Cadmium	0.9524	0.0050	1.000		95.2	75	125				
Chromium	0.9628	0.0100	1.000	0.0004570	96.2	75	125				
Copper	0.9867	0.0100	1.000		98.7	75	125				
Lead	0.8956	0.0100	1.000		89.6	75	125				
Nickel	0.8835	0.0200	1.000		88.4	75	125				
Selenium	0.9345	0.0200	1.000	0.01205	92.2	75	125				
Thallium	0.9575	0.0200	1.000		95.8	75	125				
Vanadium	0.9567	0.0100	1.000		95.7	75	125				
Zinc	0.9070	0.0200	1.000	0.006620	90.0	75	125				

Sample ID: **1501895-020DMSD** Client ID: **DUP-02-20150113-01** Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018410**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9796	0.0200	1.000		98.0	75	125	0.9491	3.17	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201578

Sample ID: **1501895-020DMSD** Client ID: **DUP-02-20150113-01** Units: **mg/L** Prep Date: **01/16/2015** Run No: **283918**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201578** Analysis Date: **01/16/2015** Seq No: **6018410**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	0.9830	0.0500	1.000		98.3	75	125	0.9564	2.75	20	
Barium	1.413	0.0200	1.000	0.4593	95.4	75	125	1.382	2.18	20	
Beryllium	0.9841	0.0100	1.000		98.4	75	125	0.9616	2.32	20	
Cadmium	0.9732	0.0050	1.000		97.3	75	125	0.9524	2.16	20	
Chromium	0.9901	0.0100	1.000	0.0004570	99.0	75	125	0.9628	2.80	20	
Copper	1.011	0.0100	1.000		101	75	125	0.9867	2.47	20	
Lead	0.9189	0.0100	1.000		91.9	75	125	0.8956	2.57	20	
Nickel	0.9045	0.0200	1.000		90.4	75	125	0.8835	2.34	20	
Selenium	0.9727	0.0200	1.000	0.01205	96.1	75	125	0.9345	4.01	20	
Thallium	0.9833	0.0200	1.000		98.3	75	125	0.9575	2.65	20	
Vanadium	0.9789	0.0100	1.000		97.9	75	125	0.9567	2.29	20	
Zinc	0.9311	0.0200	1.000	0.006620	92.4	75	125	0.9070	2.62	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **MB-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013814**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013815**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	120.1	4	200.0		60.0	45.1	115				

Sample ID: **LCSD-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013816**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	117.3	4	200.0		58.7	45.1	115	120.1	2.33	20	

Sample ID: **1501604-005BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013819**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.8	4	200.0	4.107	53.3	40.4	115				

Sample ID: **1501A32-013BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019638**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	119.1	4	200.0		59.6	40.4	115				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **1501604-005BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013820**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	119.0	4	200.0	4.107	57.5	40.4	115	110.8	7.18	20	

Sample ID: **1501A32-013BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019639**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	122.2	4	200.0		61.1	40.4	115	119.1	2.55	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201761

Sample ID: **MB-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013613**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201761**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013614**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2614	0.010	0.2500		105	90	110				

Sample ID: **1501857-004BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013637**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.03630	0.010	0.2500	0.006600	11.9	90	110				S

Sample ID: **1501923-001BMS**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013635**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2302	0.010	0.2500		92.1	90	110				

Sample ID: **1501923-001BMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/14/2015**		Run No: **283706**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201761**		Analysis Date: **01/15/2015**		Seq No: **6013636**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2317	0.010	0.2500		92.7	90	110	0.2302	0.649	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **MB-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017697**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.222	0	2.000		61.1	55.4	136				

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.704	0.50	2.000		85.2	66.3	118				
Acenaphthylene	1.533	1.0	2.000		76.6	64	120				
Anthracene	1.723	0.050	2.000		86.1	64.6	127				
Benz(a)anthracene	1.907	0.050	2.000		95.3	60.6	137				
Benzo(a)pyrene	1.718	0.050	2.000		85.9	64	124				
Benzo(b)fluoranthene	1.924	0.10	2.000		96.2	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **LCS-201765** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283890**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/19/2015** Seq No: **6017699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.675	0.10	2.000	0.01532	83.0	49.9	137				
Benzo(k)fluoranthene	1.780	0.050	2.000		89.0	61.7	137				
Chrysene	1.890	0.050	2.000		94.5	65.5	127				
Dibenz(a,h)anthracene	1.797	0.10	2.000	0.01265	89.2	52.4	130				
Fluoranthene	2.067	0.10	2.000		103	67	131				
Fluorene	1.680	0.10	2.000		84.0	68.3	120				
Indeno(1,2,3-cd)pyrene	1.746	0.050	2.000	0.01214	86.7	50.4	139				
Naphthalene	1.660	0.50	2.000		83.0	61.1	120				
Phenanthrene	1.719	0.050	2.000	0.008850	85.5	68	119				
Pyrene	1.737	0.050	2.000		86.8	62	127				
Surr: 4-Terphenyl-d14	1.820	0	2.000		91.0	55.4	136				

Sample ID: **1501859-006BMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283969**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201765** Analysis Date: **01/18/2015** Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.664	0.50	2.000		83.2	45.6	120				
Acenaphthylene	1.760	1.0	2.000	0.01176	87.4	48.3	124				
Anthracene	1.916	0.050	2.000	0.02359	94.6	57.7	124				
Benz(a)anthracene	2.526	0.050	2.000		126	50.3	143				
Benzo(a)pyrene	1.657	0.050	2.000		82.9	44.2	127				
Benzo(b)fluoranthene	3.288	0.10	2.000		164	48.4	125				S
Benzo(g,h,i)perylene	1.665	0.10	2.000		83.2	40.2	122				
Benzo(k)fluoranthene	1.508	0.050	2.000		75.4	45.5	122				
Chrysene	1.717	0.050	2.000		85.9	46	124				
Dibenz(a,h)anthracene	1.993	0.10	2.000		99.7	40.1	128				
Fluoranthene	2.002	0.10	2.000	0.01522	99.3	58	127				
Fluorene	1.747	0.10	2.000	0.01972	86.4	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201765

Sample ID: **1501859-006BMS**	Client ID:		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.991	0.050	2.000		99.5	40.3	129				
Naphthalene	1.643	0.50	2.000	0.02433	80.9	46.6	120				
Phenanthrene	1.697	0.050	2.000	0.01126	84.3	50.6	122				
Pyrene	1.799	0.050	2.000	0.04382	87.8	50.1	128				
Surr: 4-Terphenyl-d14	1.916	0	2.000		95.8	55.4	136				

Sample ID: **1501859-006BMSD**	Client ID:		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283969**
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201765**	Analysis Date: **01/18/2015**	Seq No: **6019921**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.829	0.50	2.000		91.5	45.6	120	1.664	9.44	29.4	
Acenaphthylene	1.943	1.0	2.000	0.01176	96.6	48.3	124	1.760	9.89	32.5	
Anthracene	2.068	0.050	2.000	0.02359	102	57.7	124	1.916	7.63	21.9	
Benz(a)anthracene	2.738	0.050	2.000		137	50.3	143	2.526	8.06	26.8	
Benzo(a)pyrene	1.776	0.050	2.000		88.8	44.2	127	1.657	6.92	40.9	
Benzo(b)fluoranthene	3.674	0.10	2.000		184	48.4	125	3.288	11.1	24.2	S
Benzo(g,h,i)perylene	1.799	0.10	2.000		90.0	40.2	122	1.665	7.77	26.2	
Benzo(k)fluoranthene	1.620	0.050	2.000		81.0	45.5	122	1.508	7.10	23.3	
Chrysene	1.880	0.050	2.000		94.0	46	124	1.717	9.06	25	
Dibenz(a,h)anthracene	2.135	0.10	2.000		107	40.1	128	1.993	6.88	23.6	
Fluoranthene	2.173	0.10	2.000	0.01522	108	58	127	2.002	8.22	23.5	
Fluorene	1.928	0.10	2.000	0.01972	95.4	52.6	124	1.747	9.84	31.5	
Indeno(1,2,3-cd)pyrene	2.131	0.050	2.000		107	40.3	129	1.991	6.82	28.8	
Naphthalene	1.788	0.50	2.000	0.02433	88.2	46.6	120	1.643	8.47	22.9	
Phenanthrene	1.867	0.050	2.000	0.01126	92.8	50.6	122	1.697	9.54	20.2	
Pyrene	1.962	0.050	2.000	0.04382	95.9	50.1	128	1.799	8.65	24.7	
Surr: 4-Terphenyl-d14	2.060	0	2.000		103	55.4	136	1.916	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **MB-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017084**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	2.051	0	2.000		103	55.4	136				

Sample ID: **LCS-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.615	0.50	2.000		80.7	66.3	118				
Acenaphthylene	1.412	1.0	2.000		70.6	64	120				
Anthracene	1.567	0.050	2.000		78.3	64.6	127				
Benz(a)anthracene	1.684	0.050	2.000		84.2	60.6	137				
Benzo(a)pyrene	1.620	0.050	2.000		81.0	64	124				
Benzo(b)fluoranthene	1.994	0.10	2.000		99.7	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **LCS-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.879	0.10	2.000		93.9	49.9	137				
Benzo(k)fluoranthene	1.696	0.050	2.000		84.8	61.7	137				
Chrysene	1.755	0.050	2.000		87.7	65.5	127				
Dibenz(a,h)anthracene	1.928	0.10	2.000		96.4	52.4	130				
Fluoranthene	1.758	0.10	2.000		87.9	67	131				
Fluorene	1.609	0.10	2.000		80.5	68.3	120				
Indeno(1,2,3-cd)pyrene	1.863	0.050	2.000		93.1	50.4	139				
Naphthalene	1.550	0.50	2.000		77.5	61.1	120				
Phenanthrene	1.653	0.050	2.000		82.6	68	119				
Pyrene	1.681	0.050	2.000		84.0	62	127				
Surr: 4-Terphenyl-d14	1.781	0	2.000		89.0	55.4	136				

Sample ID: **1501A32-013CMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.525	0.50	2.000		76.2	45.6	120				
Acenaphthylene	1.303	1.0	2.000		65.1	48.3	124				
Anthracene	1.448	0.050	2.000		72.4	57.7	124				
Benz(a)anthracene	1.462	0.050	2.000	0.01370	72.4	50.3	143				
Benzo(a)pyrene	1.499	0.050	2.000	0.01619	74.2	44.2	127				
Benzo(b)fluoranthene	1.875	0.10	2.000	0.02263	92.6	48.4	125				
Benzo(g,h,i)perylene	1.815	0.10	2.000	0.03551	89.0	40.2	122				
Benzo(k)fluoranthene	1.724	0.050	2.000	0.01689	85.4	45.5	122				
Chrysene	1.674	0.050	2.000	0.01554	82.9	46	124				
Dibenz(a,h)anthracene	1.734	0.10	2.000	0.02836	85.3	40.1	128				
Fluoranthene	1.620	0.10	2.000	0.01414	80.3	58	127				
Fluorene	1.497	0.10	2.000		74.8	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **1501A32-013CMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.776	0.050	2.000	0.02686	87.5	40.3	129				
Naphthalene	1.598	0.50	2.000	0.1289	73.5	46.6	120				
Phenanthrene	1.550	0.050	2.000	0.01511	76.8	50.6	122				
Pyrene	1.613	0.050	2.000		80.6	50.1	128				
Surr: 4-Terphenyl-d14	1.597	0	2.000		79.9	55.4	136				

Sample ID: **1501A32-013CMSD** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017101**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.451	0.50	2.000		72.5	45.6	120	1.525	4.98	29.4	
Acenaphthylene	1.230	1.0	2.000		61.5	48.3	124	1.303	5.79	32.5	
Anthracene	1.412	0.050	2.000		70.6	57.7	124	1.448	2.56	21.9	
Benz(a)anthracene	1.493	0.050	2.000	0.01370	73.9	50.3	143	1.462	2.06	26.8	
Benzo(a)pyrene	1.445	0.050	2.000	0.01619	71.5	44.2	127	1.499	3.66	40.9	
Benzo(b)fluoranthene	1.808	0.10	2.000	0.02263	89.3	48.4	125	1.875	3.61	24.2	
Benzo(g,h,i)perylene	1.640	0.10	2.000	0.03551	80.2	40.2	122	1.815	10.2	26.2	
Benzo(k)fluoranthene	1.638	0.050	2.000	0.01689	81.1	45.5	122	1.724	5.11	23.3	
Chrysene	1.675	0.050	2.000	0.01554	83.0	46	124	1.674	0.033	25	
Dibenz(a,h)anthracene	1.636	0.10	2.000	0.02836	80.4	40.1	128	1.734	5.85	23.6	
Fluoranthene	1.604	0.10	2.000	0.01414	79.5	58	127	1.620	1.01	23.5	
Fluorene	1.439	0.10	2.000		71.9	52.6	124	1.497	3.94	31.5	
Indeno(1,2,3-cd)pyrene	1.645	0.050	2.000	0.02686	80.9	40.3	129	1.776	7.67	28.8	
Naphthalene	1.474	0.50	2.000	0.1289	67.2	46.6	120	1.598	8.11	22.9	
Phenanthrene	1.524	0.050	2.000	0.01511	75.4	50.6	122	1.550	1.74	20.2	
Pyrene	1.553	0.050	2.000		77.6	50.1	128	1.613	3.79	24.7	
Surr: 4-Terphenyl-d14	1.616	0	2.000		80.8	55.4	136	1.597	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **MB-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014981**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	42.70	0	50.00		85.4	70.6	123				
Surr: Dibromofluoromethane	54.98	0	50.00		110	78.7	124				
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120				

Sample ID: **LCS-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.66	5.0	50.00		93.3	72.8	128				
Toluene	46.50	5.0	50.00		93.0	74.9	127				
Trichloroethene	49.63	5.0	50.00		99.3	70.5	134				
Surr: 4-Bromofluorobenzene	40.51	0	50.00		81.0	70.6	123				
Surr: Dibromofluoromethane	50.05	0	50.00		100	78.7	124				
Surr: Toluene-d8	46.15	0	50.00		92.3	81.3	120				

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.43	5.0	50.00		105	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **1501934-001AMS**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283753**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201805**		Analysis Date: **01/16/2015**		Seq No: **6016673**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Toluene	51.66	5.0	50.00		103	70.5	137			
Trichloroethene	52.57	5.0	50.00		105	71.8	139			
Surr: 4-Bromofluorobenzene	37.51	0	50.00		75.0	70.6	123			
Surr: Dibromofluoromethane	48.86	0	50.00		97.7	78.7	124			
Surr: Toluene-d8	47.61	0	50.00		95.2	81.3	120			

Sample ID: **1501934-001AMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283753**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201805**		Analysis Date: **01/16/2015**		Seq No: **6016674**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Benzene	53.44	5.0	50.00		107	70	135	52.43	1.91	20
Toluene	52.74	5.0	50.00		105	70.5	137	51.66	2.07	20
Trichloroethene	53.90	5.0	50.00		108	71.8	139	52.57	2.50	20
Surr: 4-Bromofluorobenzene	37.47	0	50.00		74.9	70.6	123	37.51	0	0
Surr: Dibromofluoromethane	49.24	0	50.00		98.5	78.7	124	48.86	0	0
Surr: Toluene-d8	45.13	0	50.00		90.3	81.3	120	47.61	0	0

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201824

Sample ID: **MB-201824**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017914**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201824**	Client ID:			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017915**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004957	0.00020	0.0050		99.1	80	120				

Sample ID: **1501895-001CMS**	Client ID: **MW-321-20150113-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017917**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004882	0.00020	0.0050		97.6	70	130				

Sample ID: **1501895-001CMSD**	Client ID: **MW-321-20150113-01**			Units: **mg/L**	Prep Date: **01/19/2015**	Run No: **283884**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**			BatchID: **201824**	Analysis Date: **01/19/2015**	Seq No: **6017918**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005067	0.00020	0.0050		101	70	130	0.004882	3.70	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201831

Sample ID: **MB-201831**	Client ID:			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6015967**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201831**	Client ID:			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6015968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2473	0.010	0.2500		98.9	90	110				

Sample ID: **1501895-010EMS**	Client ID: **MW-202DR-20150113-01**			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6016007**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2686	0.010	0.2500		107	90	110				

Sample ID: **1501895-020EMS**	Client ID: **DUP-02-20150113-01**			Units: **mg/L**	Prep Date: **01/16/2015**	Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6016010**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2605	0.010	0.2500	0.007500	101	90	110				

Sample ID: **1501895-010EMSD**	Client ID: **MW-202DR-20150113-01**			Units: **mg/L**	Prep Date: **01/15/2015**	Run No: **283812**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201831**	Analysis Date: **01/16/2015**	Seq No: **6016009**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2680	0.010	0.2500		107	90	110	0.2686	0.224	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201848

Sample ID: **MB-201848** Client ID: Units: **ug/L** Prep Date: **01/17/2015** Run No: **283838**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201848** Analysis Date: **01/17/2015** Seq No: **6016643**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.27	0	50.00		94.5	70.6	123				
Surr: Dibromofluoromethane	48.93	0	50.00		97.9	78.7	124				
Surr: Toluene-d8	48.18	0	50.00		96.4	81.3	120				

Sample ID: **LCS-201848** Client ID: Units: **ug/L** Prep Date: **01/17/2015** Run No: **283838**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201848** Analysis Date: **01/17/2015** Seq No: **6016642**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.99	5.0	50.00		94.0	72.8	128				
Toluene	46.86	5.0	50.00		93.7	74.9	127				
Trichloroethene	48.44	5.0	50.00		96.9	70.5	134				
Surr: 4-Bromofluorobenzene	47.45	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	48.69	0	50.00		97.4	78.7	124				
Surr: Toluene-d8	48.05	0	50.00		96.1	81.3	120				

Sample ID: **1501895-001AMS** Client ID: **MW-321-20150113-01** Units: **ug/L** Prep Date: **01/17/2015** Run No: **283838**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201848** Analysis Date: **01/17/2015** Seq No: **6016645**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.08	5.0	50.00		94.2	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: 201848

Sample ID: **1501895-001AMS**	Client ID: **MW-321-20150113-01**	Units: **ug/L**	Prep Date: **01/17/2015**	Run No: **283838**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201848**	Analysis Date: **01/17/2015**	Seq No: **6016645**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	46.92	5.0	50.00		93.8	70.5	137				
Trichloroethene	47.86	5.0	50.00		95.7	71.8	139				
Surr: 4-Bromofluorobenzene	47.45	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	49.74	0	50.00		99.5	78.7	124				
Surr: Toluene-d8	48.75	0	50.00		97.5	81.3	120				

Sample ID: **1501895-001AMSD**	Client ID: **MW-321-20150113-01**	Units: **ug/L**	Prep Date: **01/17/2015**	Run No: **283838**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201848**	Analysis Date: **01/17/2015**	Seq No: **6016646**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.76	5.0	50.00		93.5	70	135	47.08	0.682	20	
Toluene	47.15	5.0	50.00		94.3	70.5	137	46.92	0.489	20	
Trichloroethene	47.19	5.0	50.00		94.4	71.8	139	47.86	1.41	20	
Surr: 4-Bromofluorobenzene	48.35	0	50.00		96.7	70.6	123	47.45	0	0	
Surr: Dibromofluoromethane	49.09	0	50.00		98.2	78.7	124	49.74	0	0	
Surr: Toluene-d8	48.54	0	50.00		97.1	81.3	120	48.75	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283659

Sample ID: **MB-R283659** Client ID: Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **MBLK** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012390**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283659** Client ID: Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **LCS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012391**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5297	0.100	0.5000		106	85	115				

Sample ID: **1501895-010GMS** Client ID: **MW-202DR-20150113-01** Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **MS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012400**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5187	0.100	0.5000		104	80	120				

Sample ID: **1501895-010GMSD** Client ID: **MW-202DR-20150113-01** Units: **mg/L** Prep Date: Run No: **283659**
SampleType: **MSD** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283659** Analysis Date: **01/14/2015** Seq No: **6012401**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5078	0.100	0.5000		102	80	120	0.5187	2.12	30	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283852

Sample ID: **MB-R283852**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016991**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R283852**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016989**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.977	0.25	5.000		99.5	90	110				
Sulfate	23.25	1.0	25.00		93.0	90	110				

Sample ID: **1501912-002BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016996**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	58.45	2.5	50.00	5.888	105	90	110				
Sulfate	299.3	10	250.0	43.27	102	90	110				

Sample ID: **1501913-002BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6017000**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	56.75	2.5	50.00	6.649	100	90	110				
Sulfate	293.7	10	250.0	40.26	101	90	110				

Sample ID: **1501912-002BMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283852**	
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**				BatchID: **R283852**		Analysis Date: **01/14/2015**		Seq No: **6016997**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.57	2.5	50.00	5.888	111	90	110	58.45	5.19	20	S

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283852

Sample ID: **1501912-002BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date:
BatchID: **R283852** Analysis Date: **01/14/2015**
Run No: **283852**
Seq No: **6016997**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	314.8	10	250.0	43.27	109	90	110	299.3	5.05	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1501895

ANALYTICAL QC SUMMARY REPORT

BatchID: R283916

Sample ID: **MB-R283916**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **283916**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R283916**	Analysis Date: **01/19/2015**		Seq No: **6018208**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501895-010HDUP**	Client ID: **MW-202DR-20150113-01**			Units: **mg/L**	Prep Date:		Run No: **283916**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R283916**	Analysis Date: **01/19/2015**		Seq No: **6018219**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	8.280	1.00						8.270	0.121	20	H

Qualifiers:

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

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 26, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501A32

Analytical Environmental Services, Inc. received 22 samples on 1/15/2015 11:57:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501A32

Date: 01/14/2015 Page 1 of 2

COMPANY: ENVIRONMENTAL RESOURCES MANAGEMENT

ADDRESS: 3200 WINDY HILL RD SE SUITE 1500 W ATLANTA, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: C. BROCKS, R. MAYETTE, A. NEAL, A. SHOEBOTS, W. VIRGO

SIGNATURE:

ANALYSIS REQUESTED

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

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	VOC (8260B)	SVOC (8270C)	TOT. METALS+Hg (6010B, 7470A, 7196A)	CYANIDE (9012A)	GASES RSK-175	FERROUS Fe (SM 3500)	SULFATE+NITRATE (300.0)	[redacted]	8270 SIM	REMARKS	No # of Containers
1	MW-306SAP-20150114-01	01/14/2015	8:55	X		GW	H	2	2	1	1							6
2	MW-504BR-20150114-01	"	8:58															6
3	MW-511BR-20150114-01	"	9:05															6
4	MW-500BR-20150114-01	"	9:45															6
5	MW-602-20150114-01	"	10:00															6
6	MW-510BR-20150114-01	"	10:35															6
7	MW-306BR-20150114-01	"	10:50															6
8	MW-601-20150114-01	"	11:10															6
9	MW-513BR-20150114-01	"	11:16															6
10	MW-12-20150114-01	"	12:23				NA					2	1	1				10
11	MW-401D-20150114-01	"	12:25									1		1	1			11
12	MW-206-20150114-01	"	12:25															11
13	MW-319-20150114-01	"	12:35															11
14	MW-318-20150114-01	"	12:45															10

RELINQUISHED BY / DATE/TIME

1: 01/15/2015 9:21

2: 01-15-2015 11:57AM

3:

RECEIVED BY / DATE/TIME

1: 01-15-15 9:21am

2: Cataja Reeves 1/15/15 11:57a

3:

PROJECT INFORMATION

PROJECT NAME: ACC ATLANTA

PROJECT #: 0230712.52

SITE ADDRESS: 512 87th St Atlanta, GA 30901

SEND REPORT TO: [redacted]@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 107

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

STATE PROGRAM (if any):

E-mail? (Y) N: Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL (COURIER)

GREYHOUND OTHER

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

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

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

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 15D1A32

Date: 01/14/2015 Page 2 of 2

COMPANY:	ADDRESS:
ENVIRONMENTAL RESOURCES MANAGEMENT	3200 WINDY HILL RD SE SUITE 1500W ATLANTA, GA 30339
PHONE: (678) 486-2700	FAX:
SAMPLED BY: C. BROOKS, R. MAYETTE, L. NEAL, A. SHOREDITS, W. VIRGO	SIGNATURE:

ANALYSIS REQUESTED

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

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC (8260B)	SVOC (8270C)	TOT. HEPTANE HS (6010B, 6020B, HydroD)	CYANIDE (9012A)	GASES RSK-175	FERROUS Fe (SM3500)	SULFATE + NITRATE (9056)	[redacted]	CO2 + O2 + CP	REMARKS	No # of Containers
	PRESERVATION (See codes)																
1	MW-203-20150114-01	01/14/2015	15:50	X		GW	2	2	1	1	2	1	1	1			11
2	MW-512B2-20150114-01	-11-	16:20	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			11
3	MW-404PR-20150114-01	-11-	16:30											↓			4
4	MW-19-20150114-01	-11-	16:45														10
5	MW-401SAP-20150114-01	-11-	17:25														10
6	DUP-03-20150114-01	~~01/14~~ -11-	NA	↓		↓	↓	↓	↓	↓	↓	↓	↓					10
7	TB-01	NA	NA			W	2									6 coolers, 2 w/ VOA's		2
8	TB-02	NA	NA			W	2											2
9	MW-319-20150115-01	01/15/2015	8:30	X		GW	2	2	1	1	2	1	1			[redacted] MD		10
10																		
11																		
12																		
13																		
14																		

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/15/2015 09:21	1:	01-15-2015 9:21AM
2: 01-15-15 12:30AM		2: Georgia Reeves	1/15/15 11:57a
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGC Augusta
PROJECT #: 0230712.52
SITE ADDRESS: 812 8th St Augusta GA 30901
SEND REPORT TO: greg.jirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers: 67

Turnaround Time Request: +10 / 77
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

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

SPECIAL INSTRUCTIONS/COMMENTS:

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

SAMPLES RECEIVED AFTER 5PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

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

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501A32

Case Narrative

Sample ID "TB-02" was listed on the COC, but was not received. Andreas Shoredits was notified on 1/16/15.

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. F fraction samples were analyzed in the laboratory which is a deviation from the method.

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1501A32-004A, -005A, & -008A required dilution during preparation and analysis resulting in elevated reporting limits.

PAH Analysis by Method 8270D SIM:

Due to sample matrix, sample 1501A32-014C required dilution during preparation and/or analysis resulting in elevated reporting limits.

Sample "MW-319-20150115-01" was not analyzed for MS/MSD per Donald Dowling on 1/20/15.

Sample ID "DUP-03-20150114-01" is reporting with an H-Flag since there is no collection time on the COC.

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:55:00 AM
Lab ID:	1501A32-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 13:20	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 13:20	GK
Surr: 4-Bromofluorobenzene	95.5	70.6-123		%REC	201897	1	01/20/2015 13:20	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201897	1	01/20/2015 13:20	GK
Surr: Toluene-d8	96.9	81.3-120		%REC	201897	1	01/20/2015 13:20	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.010	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	0.66	0.50		ug/L	201771	1	01/18/2015 18:43	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 18:43	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 18:43	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 18:43	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 18:43	YH
Surr: 4-Terphenyl-d14	106	55.4-136		%REC	201771	1	01/18/2015 18:43	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:18	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:13	JL
Barium	0.648	0.0200		mg/L	201985	1	01/22/2015 23:13	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:55:00 AM
Lab ID:	1501A32-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:13	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Nickel	0.151	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:13	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:13	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-504BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:58:00 AM
Lab ID:	1501A32-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 13:50	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 13:50	GK
Surr: 4-Bromofluorobenzene	94.9	70.6-123		%REC	201897	1	01/20/2015 13:50	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 13:50	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201897	1	01/20/2015 13:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.021	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	0.65	0.50		ug/L	201771	1	01/18/2015 19:08	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 19:08	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 19:08	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Phenanthrene	0.088	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:08	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 19:08	YH
Surr: 4-Terphenyl-d14	58.4	55.4-136		%REC	201771	1	01/18/2015 19:08	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:29	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:17	JL
Barium	0.184	0.0200		mg/L	201985	1	01/22/2015 23:17	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-504BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 8:58:00 AM
Lab ID:	1501A32-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:17	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:17	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:17	JL
Zinc	0.121	0.0200		mg/L	201985	1	01/22/2015 23:17	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-511BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:05:00 AM
Lab ID:	1501A32-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:38	NP
Benzene	450	50		ug/L	201897	10	01/20/2015 11:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Ethylbenzene	17	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Toluene	35	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Xylenes, Total	12	5.0		ug/L	201897	1	01/20/2015 15:38	NP
Surr: 4-Bromofluorobenzene	91.9	70.6-123		%REC	201897	1	01/20/2015 15:38	NP
Surr: 4-Bromofluorobenzene	95.8	70.6-123		%REC	201897	10	01/20/2015 11:50	GK
Surr: Dibromofluoromethane	98.4	78.7-124		%REC	201897	10	01/20/2015 11:50	GK
Surr: Dibromofluoromethane	105	78.7-124		%REC	201897	1	01/20/2015 15:38	NP
Surr: Toluene-d8	91.8	81.3-120		%REC	201897	1	01/20/2015 15:38	NP
Surr: Toluene-d8	96.6	81.3-120		%REC	201897	10	01/20/2015 11:50	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	150	50		ug/L	201771	100	01/22/2015 15:47	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 19:34	YH
Acenaphthene	3.3	0.50		ug/L	201771	1	01/18/2015 19:34	YH
Fluorene	0.89	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Phenanthrene	0.76	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Anthracene	0.081	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Pyrene	0.055	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:34	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 19:34	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201771	1	01/18/2015 19:34	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:31	TA
METALS, TOTAL SW6010C				(SW3010A)				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-511BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:05:00 AM
Lab ID:	1501A32-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:21	JL
Barium	0.0678	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:21	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:21	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:21	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-500BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:45:00 AM
Lab ID:	1501A32-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	5000		ug/L	201897	100	01/20/2015 09:20	GK
Benzene	13000	500		ug/L	201897	100	01/20/2015 09:20	GK
Carbon disulfide	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Ethylbenzene	1200	500		ug/L	201897	100	01/20/2015 09:20	GK
Methylene chloride	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Toluene	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Trichloroethene	BRL	500		ug/L	201897	100	01/20/2015 09:20	GK
Xylenes, Total	610	500		ug/L	201897	100	01/20/2015 09:20	GK
Surr: 4-Bromofluorobenzene	96	70.6-123		%REC	201897	100	01/20/2015 09:20	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201897	100	01/20/2015 09:20	GK
Surr: Toluene-d8	95.7	81.3-120		%REC	201897	100	01/20/2015 09:20	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	2800	500		ug/L	201771	1000	01/20/2015 19:06	YH
Acenaphthylene	1.2	1.0		ug/L	201771	1	01/18/2015 19:59	YH
Acenaphthene	86	5.0		ug/L	201771	10	01/19/2015 17:49	YH
Fluorene	14	1.0		ug/L	201771	10	01/19/2015 17:49	YH
Phenanthrene	12	0.50		ug/L	201771	10	01/19/2015 17:49	YH
Anthracene	1.6	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Fluoranthene	0.51	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Pyrene	0.59	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 19:59	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 19:59	YH
Surr: 4-Terphenyl-d14	96.1	55.4-136		%REC	201771	1	01/18/2015 19:59	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:33	TA
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:25	JL
Barium	0.364	0.0200		mg/L	201985	1	01/22/2015 23:25	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-500BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 9:45:00 AM
Lab ID:	1501A32-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:25	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:25	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:25	JL
Zinc	0.0686	0.0200		mg/L	201985	1	01/22/2015 23:25	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-600-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:00:00 AM
Lab ID:	1501A32-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	25000		ug/L	201897	500	01/20/2015 08:50	GK
Benzene	25000	2500		ug/L	201897	500	01/20/2015 08:50	GK
Carbon disulfide	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Ethylbenzene	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Methylene chloride	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Toluene	8500	2500		ug/L	201897	500	01/20/2015 08:50	GK
Trichloroethene	BRL	2500		ug/L	201897	500	01/20/2015 08:50	GK
Xylenes, Total	2600	2500		ug/L	201897	500	01/20/2015 08:50	GK
Surr: 4-Bromofluorobenzene	95.7	70.6-123		%REC	201897	500	01/20/2015 08:50	GK
Surr: Dibromofluoromethane	99.4	78.7-124		%REC	201897	500	01/20/2015 08:50	GK
Surr: Toluene-d8	94.8	81.3-120		%REC	201897	500	01/20/2015 08:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5400	500		ug/L	201771	1000	01/20/2015 19:33	YH
Acenaphthylene	120	100		ug/L	201771	100	01/20/2015 00:47	YH
Acenaphthene	14	5.0		ug/L	201771	10	01/19/2015 18:15	YH
Fluorene	20	1.0		ug/L	201771	10	01/19/2015 18:15	YH
Phenanthrene	15	0.50		ug/L	201771	10	01/19/2015 18:15	YH
Anthracene	2.4	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Fluoranthene	1.2	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Pyrene	1.8	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Benz(a)anthracene	0.38	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Chrysene	0.30	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(b)fluoranthene	0.28	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(k)fluoranthene	0.085	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(a)pyrene	0.30	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Indeno(1,2,3-cd)pyrene	0.11	0.050		ug/L	201771	1	01/18/2015 20:25	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Benzo(g,h,i)perylene	0.16	0.10		ug/L	201771	1	01/18/2015 20:25	YH
Surr: 4-Terphenyl-d14	87.3	55.4-136		%REC	201771	1	01/18/2015 20:25	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:35	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:28	JL
Barium	0.157	0.0200		mg/L	201985	1	01/22/2015 23:28	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-600-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:00:00 AM
Lab ID:	1501A32-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:28	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Copper	0.0312	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:28	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:28	JL
Zinc	0.208	0.0200		mg/L	201985	1	01/22/2015 23:28	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-510BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:35:00 AM
Lab ID:	1501A32-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:07	NP
Benzene	1100	250		ug/L	201897	50	01/20/2015 10:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Ethylbenzene	180	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Toluene	190	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Xylenes, Total	200	5.0		ug/L	201897	1	01/20/2015 16:07	NP
Surr: 4-Bromofluorobenzene	95.1	70.6-123		%REC	201897	50	01/20/2015 10:20	GK
Surr: 4-Bromofluorobenzene	105	70.6-123		%REC	201897	1	01/20/2015 16:07	NP
Surr: Dibromofluoromethane	99.9	78.7-124		%REC	201897	50	01/20/2015 10:20	GK
Surr: Dibromofluoromethane	104	78.7-124		%REC	201897	1	01/20/2015 16:07	NP
Surr: Toluene-d8	95.6	81.3-120		%REC	201897	50	01/20/2015 10:20	GK
Surr: Toluene-d8	93	81.3-120		%REC	201897	1	01/20/2015 16:07	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	300	50		ug/L	201771	100	01/20/2015 01:13	YH
Acenaphthylene	2.7	1.0		ug/L	201771	1	01/18/2015 20:50	YH
Acenaphthene	7.8	0.50		ug/L	201771	1	01/18/2015 20:50	YH
Fluorene	4.7	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Phenanthrene	5.6	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Anthracene	0.86	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Fluoranthene	0.78	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Pyrene	0.97	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Benz(a)anthracene	0.17	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Chrysene	0.14	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(b)fluoranthene	0.13	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(a)pyrene	0.13	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Indeno(1,2,3-cd)pyrene	0.058	0.050		ug/L	201771	1	01/18/2015 20:50	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 20:50	YH
Surr: 4-Terphenyl-d14	74	55.4-136		%REC	201771	1	01/18/2015 20:50	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:37	TA
METALS, TOTAL SW6010C				**(SW3010A)**				

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-510BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:35:00 AM
Lab ID:	1501A32-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:32	JL
Barium	0.109	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:32	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:32	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:32	JL
Zinc	0.0939	0.0200		mg/L	201985	1	01/22/2015 23:32	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:50:00 AM
Lab ID:	1501A32-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:09	NP
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 15:09	NP
Surr: 4-Bromofluorobenzene	82.5	70.6-123		%REC	201897	1	01/20/2015 15:09	NP
Surr: Dibromofluoromethane	108	78.7-124		%REC	201897	1	01/20/2015 15:09	NP
Surr: Toluene-d8	98.8	81.3-120		%REC	201897	1	01/20/2015 15:09	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 21:15	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 21:15	YH
Acenaphthene	5.3	0.50		ug/L	201771	1	01/18/2015 21:15	YH
Fluorene	0.59	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Anthracene	0.062	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:15	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 21:15	YH
Surr: 4-Terphenyl-d14	100	55.4-136		%REC	201771	1	01/18/2015 21:15	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:39	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:36	JL
Barium	0.535	0.0200		mg/L	201985	1	01/22/2015 23:36	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-306BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 10:50:00 AM
Lab ID:	1501A32-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:36	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:36	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:36	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-601-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:10:00 AM
Lab ID:	1501A32-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	5000		ug/L	201897	100	01/20/2015 09:50	GK
Benzene	6900	500		ug/L	201897	100	01/20/2015 09:50	GK
Carbon disulfide	BRL	500		ug/L	201897	100	01/20/2015 09:50	GK
Ethylbenzene	960	500		ug/L	201897	100	01/20/2015 09:50	GK
Methylene chloride	BRL	500		ug/L	201897	100	01/20/2015 09:50	GK
Toluene	2100	500		ug/L	201897	100	01/20/2015 09:50	GK
Trichloroethene	BRL	500		ug/L	201897	100	01/20/2015 09:50	GK
Xylenes, Total	1900	500		ug/L	201897	100	01/20/2015 09:50	GK
Surr: 4-Bromofluorobenzene	95.9	70.6-123		%REC	201897	100	01/20/2015 09:50	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	100	01/20/2015 09:50	GK
Surr: Toluene-d8	95.8	81.3-120		%REC	201897	100	01/20/2015 09:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.022	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	6500	500		ug/L	201771	1000	01/21/2015 22:56	YH
Acenaphthylene	45	10		ug/L	201771	10	01/19/2015 19:04	YH
Acenaphthene	12	5.0		ug/L	201771	10	01/19/2015 19:04	YH
Fluorene	36	1.0		ug/L	201771	10	01/19/2015 19:04	YH
Phenanthrene	17	0.50		ug/L	201771	10	01/19/2015 19:04	YH
Anthracene	4.4	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Fluoranthene	0.49	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Pyrene	0.47	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 21:41	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 21:41	YH
Surr: 4-Terphenyl-d14	91.5	55.4-136		%REC	201771	1	01/18/2015 21:41	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:41	TA
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:40	JL
Barium	0.275	0.0200		mg/L	201985	1	01/22/2015 23:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-601-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:10:00 AM
Lab ID:	1501A32-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:40	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:40	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:40	JL
Zinc	0.0379	0.0200		mg/L	201985	1	01/22/2015 23:40	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-513BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:15:00 AM
Lab ID:	1501A32-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 14:20	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 14:20	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201897	1	01/20/2015 14:20	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 14:20	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201897	1	01/20/2015 14:20	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201831	1	01/16/2015 12:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 22:06	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 22:06	YH
Acenaphthene	1.3	0.50		ug/L	201771	1	01/18/2015 22:06	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Anthracene	0.082	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:06	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 22:06	YH
Surr: 4-Terphenyl-d14	97.5	55.4-136		%REC	201771	1	01/18/2015 22:06	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:43	TA
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:44	JL
Barium	0.711	0.0200		mg/L	201985	1	01/22/2015 23:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-513BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 11:15:00 AM
Lab ID:	1501A32-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:44	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:44	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:44	JL
Zinc	0.0224	0.0200		mg/L	201985	1	01/22/2015 23:44	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-12-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:23:00 PM
Lab ID:	1501A32-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:05	NP
Benzene	3500	250		ug/L	201897	50	01/20/2015 10:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:05	NP
Ethylbenzene	930	250		ug/L	201897	50	01/20/2015 10:50	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:05	NP
Toluene	720	250		ug/L	201897	50	01/20/2015 10:50	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 17:05	NP
Xylenes, Total	940	250		ug/L	201897	50	01/20/2015 10:50	GK
Surr: 4-Bromofluorobenzene	97.4	70.6-123		%REC	201897	50	01/20/2015 10:50	GK
Surr: 4-Bromofluorobenzene	109	70.6-123		%REC	201897	1	01/20/2015 17:05	NP
Surr: Dibromofluoromethane	98.2	78.7-124		%REC	201897	50	01/20/2015 10:50	GK
Surr: Dibromofluoromethane	95.6	78.7-124		%REC	201897	1	01/20/2015 17:05	NP
Surr: Toluene-d8	96.5	81.3-120		%REC	201897	50	01/20/2015 10:50	GK
Surr: Toluene-d8	93.5	81.3-120		%REC	201897	1	01/20/2015 17:05	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	3700	500		ug/L	201771	1000	01/21/2015 22:29	YH
Acenaphthylene	1.7	1.0		ug/L	201771	1	01/18/2015 22:32	YH
Acenaphthene	69	5.0		ug/L	201771	10	01/19/2015 19:31	YH
Fluorene	18	1.0		ug/L	201771	10	01/19/2015 19:31	YH
Phenanthrene	11	0.50		ug/L	201771	10	01/19/2015 19:31	YH
Anthracene	1.5	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Fluoranthene	0.26	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Pyrene	0.23	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:32	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 22:32	YH
Surr: 4-Terphenyl-d14	99.7	55.4-136		%REC	201771	1	01/18/2015 22:32	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:45	TA
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-12-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:23:00 PM
Lab ID:	1501A32-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 20:36	JW
Sulfate	BRL	1.0		mg/L	R283938	1	01/15/2015 20:36	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	3000	80		ug/L	201752	20	01/15/2015 20:02	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	6.66	1.00		mg/L	R283868	10	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	3.02	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	251	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:48	JL
Barium	0.231	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 23:48	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:48	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/22/2015 23:48	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401D-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 14:55	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Trichloroethene	18	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 14:55	GK
Surr: 4-Bromofluorobenzene	94.1	70.6-123		%REC	201897	1	01/20/2015 14:55	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 14:55	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201897	1	01/20/2015 14:55	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.1	0.50		ug/L	201771	1	01/18/2015 22:57	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 22:57	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 22:57	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 22:57	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 22:57	YH
Surr: 4-Terphenyl-d14	112	55.4-136		%REC	201771	1	01/18/2015 22:57	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:51	TA
ION SCAN SW9056A								
Nitrate	0.74	0.25		mg/L	R283938	1	01/15/2015 20:50	JW
Sulfate	130	2.0		mg/L	R283938	2	01/16/2015 11:00	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401D-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 19:33	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	9.09	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	95.9	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 23:58	JL
Barium	0.0847	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Cadmium	0.0358	0.0050		mg/L	201985	1	01/22/2015 23:58	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 23:58	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 23:58	JL
Zinc	0.0387	0.0200		mg/L	201985	1	01/22/2015 23:58	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-206-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:25	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 15:25	GK
Surr: 4-Bromofluorobenzene	94.6	70.6-123		%REC	201897	1	01/20/2015 15:25	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 15:25	GK
Surr: Toluene-d8	95.9	81.3-120		%REC	201897	1	01/20/2015 15:25	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	1.8	0.50		ug/L	201771	1	01/18/2015 23:22	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 23:22	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 23:22	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 23:22	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 23:22	YH
Surr: 4-Terphenyl-d14	101	55.4-136		%REC	201771	1	01/18/2015 23:22	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:53	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 21:05	JW
Sulfate	6.8	1.0		mg/L	R283938	1	01/15/2015 21:05	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-206-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:25:00 PM
Lab ID:	1501A32-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	7	4		ug/L	201752	1	01/15/2015 19:38	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	9.41	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	319	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:02	JL
Barium	0.201	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:02	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:02	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:02	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-319-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:35:00 PM
Lab ID:	1501A32-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/19/2015 23:04	GK
Benzene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Toluene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/19/2015 23:04	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	201897	1	01/19/2015 23:04	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/19/2015 23:04	GK
Surr: Toluene-d8	96.7	81.3-120		%REC	201897	1	01/19/2015 23:04	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202068	1	01/23/2015 15:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201771	1	01/18/2015 14:58	YH
Acenaphthylene	BRL	1.0		ug/L	201771	1	01/18/2015 14:58	YH
Acenaphthene	BRL	0.50		ug/L	201771	1	01/18/2015 14:58	YH
Fluorene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Phenanthrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Benz(a)anthracene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Chrysene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201771	1	01/18/2015 14:58	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201771	1	01/18/2015 14:58	YH
Surr: 4-Terphenyl-d14	104	55.4-136		%REC	201771	1	01/18/2015 14:58	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:55	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 21:20	JW
Sulfate	22	1.0		mg/L	R283938	1	01/15/2015 21:20	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-319-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:35:00 PM
Lab ID:	1501A32-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 19:48	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.364	0.200		mg/L	R283868	2	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.50	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	174	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:06	JL
Barium	0.642	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:06	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:06	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:06	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-318-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:45:00 PM
Lab ID:	1501A32-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:36	NP
Benzene	1400	50		ug/L	201897	10	01/20/2015 12:50	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Xylenes, Total	13	5.0		ug/L	201897	1	01/20/2015 16:36	NP
Surr: 4-Bromofluorobenzene	96.2	70.6-123		%REC	201897	10	01/20/2015 12:50	GK
Surr: 4-Bromofluorobenzene	99.6	70.6-123		%REC	201897	1	01/20/2015 16:36	NP
Surr: Dibromofluoromethane	96.2	78.7-124		%REC	201897	1	01/20/2015 16:36	NP
Surr: Dibromofluoromethane	97	78.7-124		%REC	201897	10	01/20/2015 12:50	GK
Surr: Toluene-d8	85.8	81.3-120		%REC	201897	1	01/20/2015 16:36	NP
Surr: Toluene-d8	95.3	81.3-120		%REC	201897	10	01/20/2015 12:50	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	920	50		ug/L	201771	100	01/19/2015 21:16	YH
Acenaphthylene	BRL	10		ug/L	201771	10	01/19/2015 19:56	YH
Acenaphthene	37	5.0		ug/L	201771	10	01/19/2015 19:56	YH
Fluorene	4.6	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Phenanthrene	4.5	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Anthracene	0.81	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Fluoranthene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Pyrene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Benz(a)anthracene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Chrysene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(b)fluoranthene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(k)fluoranthene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(a)pyrene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Indeno(1,2,3-cd)pyrene	BRL	0.50		ug/L	201771	10	01/19/2015 19:56	YH
Dibenz(a,h)anthracene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Benzo(g,h,i)perylene	BRL	1.0		ug/L	201771	10	01/19/2015 19:56	YH
Surr: 4-Terphenyl-d14	100	55.4-136		%REC	201771	10	01/19/2015 19:56	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:57	TA
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-318-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 2:45:00 PM
Lab ID:	1501A32-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 21:34	JW
Sulfate	BRL	1.0		mg/L	R283938	1	01/15/2015 21:34	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	2800	80		ug/L	201752	20	01/15/2015 20:06	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.995	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.29	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	172	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:10	JL
Barium	0.551	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:10	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:10	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:10	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-203-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 3:50:00 PM
Lab ID:	1501A32-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 15:55	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 15:55	GK
Surr: 4-Bromofluorobenzene	93.2	70.6-123		%REC	201897	1	01/20/2015 15:55	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201897	1	01/20/2015 15:55	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201897	1	01/20/2015 15:55	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 12:38	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 12:38	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 12:38	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(k)fluoranthene	0.068	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(a)pyrene	0.075	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Indeno(1,2,3-cd)pyrene	0.13	0.050		ug/L	201811	1	01/21/2015 12:38	YH
Dibenz(a,h)anthracene	0.13	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Benzo(g,h,i)perylene	0.12	0.10		ug/L	201811	1	01/21/2015 12:38	YH
Surr: 4-Terphenyl-d14	94.6	55.4-136		%REC	201811	1	01/21/2015 12:38	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 16:59	TA
ION SCAN SW9056A								
Nitrate	0.51	0.25		mg/L	R283938	1	01/15/2015 21:49	JW
Sulfate	13	1.0		mg/L	R283938	1	01/15/2015 21:49	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-203-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 3:50:00 PM
Lab ID:	1501A32-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201752	1	01/15/2015 19:57	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	9.08	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	81.2	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:14	JL
Barium	0.0758	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:14	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:14	JL
Vanadium	0.0607	0.0100		mg/L	201985	1	01/23/2015 00:14	JL
Zinc	0.0312	0.0200		mg/L	201985	1	01/23/2015 00:14	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-512BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:20:00 PM
Lab ID:	1501A32-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:25	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 16:25	GK
Surr: 4-Bromofluorobenzene	95.9	70.6-123		%REC	201897	1	01/20/2015 16:25	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201897	1	01/20/2015 16:25	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201897	1	01/20/2015 16:25	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 13:04	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 13:04	YH
Acenaphthene	2.5	0.50		ug/L	201811	1	01/21/2015 13:04	YH
Fluorene	0.28	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Anthracene	0.051	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Indeno(1,2,3-cd)pyrene	0.081	0.050		ug/L	201811	1	01/21/2015 13:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 13:04	YH
Surr: 4-Terphenyl-d14	96.8	55.4-136		%REC	201811	1	01/21/2015 13:04	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:01	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 22:04	JW
Sulfate	22	1.0		mg/L	R283938	1	01/15/2015 22:04	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-512BR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:20:00 PM
Lab ID:	1501A32-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	4900	400		ug/L	201751	100	01/16/2015 11:52	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.00	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	269	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:17	JL
Barium	0.154	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:17	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:17	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:17	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-404DR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:30:00 PM
Lab ID:	1501A32-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 16:55	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 16:55	GK
Surr: 4-Bromofluorobenzene	94.9	70.6-123		%REC	201897	1	01/20/2015 16:55	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 16:55	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201897	1	01/20/2015 16:55	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	3.3	0.50		ug/L	201811	1	01/21/2015 14:04	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 14:04	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 14:04	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:04	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 14:04	YH
Surr: 4-Terphenyl-d14	103	55.4-136		%REC	201811	1	01/21/2015 14:04	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:03	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 22:19	JW
Sulfate	78	1.0		mg/L	R283938	1	01/15/2015 22:19	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-404DR-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:30:00 PM
Lab ID:	1501A32-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 11:18	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.96	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	253	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:21	JL
Barium	0.0678	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:21	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:21	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:21	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-19-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:45:00 PM
Lab ID:	1501A32-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:25	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 17:25	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201897	1	01/20/2015 17:25	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	201897	1	01/20/2015 17:25	GK
Surr: Toluene-d8	95.9	81.3-120		%REC	201897	1	01/20/2015 17:25	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.020	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 14:30	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 14:30	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 14:30	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Anthracene	0.092	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:30	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 14:30	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201811	1	01/21/2015 14:30	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:04	TA
ION SCAN SW9056A								
Nitrate	0.70	0.25		mg/L	R283938	1	01/15/2015 23:17	JW
Sulfate	87	1.0		mg/L	R283938	1	01/15/2015 23:17	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-19-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 4:45:00 PM
Lab ID:	1501A32-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 11:23	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.50	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	236	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/22/2015 22:47	JL
Barium	0.0824	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/22/2015 22:47	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Copper	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Lead	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Nickel	0.0275	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/22/2015 22:47	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/22/2015 22:47	JL
Zinc	0.0747	0.0200		mg/L	201985	1	01/22/2015 22:47	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 5:25:00 PM
Lab ID:	1501A32-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:56	GK
Benzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Ethylbenzene	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Toluene	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Trichloroethene	9.7	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Xylenes, Total	BRL	5.0		ug/L	201897	1	01/20/2015 17:56	GK
Surr: 4-Bromofluorobenzene	93.5	70.6-123		%REC	201897	1	01/20/2015 17:56	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201897	1	01/20/2015 17:56	GK
Surr: Toluene-d8	96.9	81.3-120		%REC	201897	1	01/20/2015 17:56	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 14:57	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 14:57	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 14:57	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 14:57	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 14:57	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201811	1	01/21/2015 14:57	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:06	TA
ION SCAN SW9056A								
Nitrate	1.7	0.25		mg/L	R283938	1	01/15/2015 23:32	JW
Sulfate	34	1.0		mg/L	R283938	1	01/15/2015 23:32	JW

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015 5:25:00 PM
Lab ID:	1501A32-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 11:29	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283868	1	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.03	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	77.4	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:25	JL
Barium	0.0961	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:25	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Copper	0.0407	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:25	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:25	JL
Zinc	0.0358	0.0200		mg/L	201985	1	01/23/2015 00:25	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-03-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015
Lab ID:	1501A32-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201897	1	01/20/2015 17:34	NP
Benzene	3600	250		ug/L	201897	50	01/20/2015 11:20	GK
Carbon disulfide	BRL	5.0		ug/L	201897	1	01/20/2015 17:34	NP
Ethylbenzene	990	250		ug/L	201897	50	01/20/2015 11:20	GK
Methylene chloride	BRL	5.0		ug/L	201897	1	01/20/2015 17:34	NP
Toluene	740	250		ug/L	201897	50	01/20/2015 11:20	GK
Trichloroethene	BRL	5.0		ug/L	201897	1	01/20/2015 17:34	NP
Xylenes, Total	980	250		ug/L	201897	50	01/20/2015 11:20	GK
Surr: 4-Bromofluorobenzene	98.1	70.6-123		%REC	201897	50	01/20/2015 11:20	GK
Surr: 4-Bromofluorobenzene	104	70.6-123		%REC	201897	1	01/20/2015 17:34	NP
Surr: Dibromofluoromethane	98.4	78.7-124		%REC	201897	50	01/20/2015 11:20	GK
Surr: Dibromofluoromethane	95.2	78.7-124		%REC	201897	1	01/20/2015 17:34	NP
Surr: Toluene-d8	95.1	81.3-120		%REC	201897	50	01/20/2015 11:20	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201897	1	01/20/2015 17:34	NP
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	0.012	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	4900	500		ug/L	201811	1000	01/22/2015 19:21	YH
Acenaphthylene	3.3	1.0		ug/L	201811	1	01/21/2015 15:23	YH
Acenaphthene	73	5.0		ug/L	201811	10	01/22/2015 10:53	YH
Fluorene	23	1.0		ug/L	201811	10	01/22/2015 10:53	YH
Phenanthrene	14	0.50		ug/L	201811	10	01/22/2015 10:53	YH
Anthracene	1.9	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Fluoranthene	0.35	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Pyrene	0.32	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 15:23	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 15:23	YH
Surr: 4-Terphenyl-d14	102	55.4-136		%REC	201811	1	01/21/2015 15:23	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201962	1	01/21/2015 17:08	TA
ION SCAN SW9056A								

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-03-20150114-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015
Lab ID:	1501A32-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283938	1	01/15/2015 23:47	JW
Sulfate	BRL	1.0		mg/L	R283938	1	01/15/2015 23:47	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	3700	80		ug/L	201751	20	01/16/2015 11:56	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	7.79	1.00	H	mg/L	R283868	10	01/15/2015 13:55	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	5.98	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	259	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Arsenic	BRL	0.0500		mg/L	201985	1	01/23/2015 00:28	JL
Barium	0.236	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Beryllium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Cadmium	BRL	0.0050		mg/L	201985	1	01/23/2015 00:28	JL
Chromium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Copper	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Lead	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Nickel	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Selenium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Thallium	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL
Vanadium	BRL	0.0100		mg/L	201985	1	01/23/2015 00:28	JL
Zinc	BRL	0.0200		mg/L	201985	1	01/23/2015 00:28	JL

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/14/2015
Lab ID:	1501A32-021	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201805	1	01/19/2015 22:34	GK
Benzene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Carbon disulfide	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Ethylbenzene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Methylene chloride	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Toluene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Trichloroethene	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Xylenes, Total	BRL	5.0		ug/L	201805	1	01/19/2015 22:34	GK
Surr: 4-Bromofluorobenzene	94.5	70.6-123		%REC	201805	1	01/19/2015 22:34	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201805	1	01/19/2015 22:34	GK
Surr: Toluene-d8	96.8	81.3-120		%REC	201805	1	01/19/2015 22:34	GK

Qualifiers:

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

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501A32

Checklist completed by Jaime Pacuar 1/16/15
Signature Date

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

Shipping container/cooler in good condition?	Yes ✓	No __	Not Present __
Custody seals intact on shipping container/cooler?	Yes ✓	No __	Not Present __
Custody seals intact on sample bottles?	Yes __	No __	Not Present ✓
Container/Temp Blank temperature in compliance? (0°≤6°C)*	Yes ✓	No __	

Cooler #1 3.1°C Cooler #2 3.2°C Cooler #3 3.4°C Cooler #4 3.1°C Cooler#5 3.5°C Cooler #6 _____

Chain of custody present?	Yes ✓	No __
Chain of custody signed when relinquished and received?	Yes ✓	No __
Chain of custody agrees with sample labels?	Yes __	No ✓
Samples in proper container/bottle?	Yes ✓	No __
Sample containers intact?	Yes ✓	No __
Sufficient sample volume for indicated test?	Yes ✓	No __
All samples received within holding time?	Yes ✓	No __
Was TAT marked on the COC?	Yes ✓	No __
Proceed with Standard TAT as per project history?	Yes __	No __ Not Applicable ✓
Water - VOA vials have zero headspace?	No VOA vials submitted __	Yes ✓ No __
Water - pH acceptable upon receipt?	Yes ✓	No __ Not Applicable __

Adjusted? _____ Checked by Fayaz

Sample Condition: Good ✓ Other(Explain) _____

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

See Case Narrative for resolution of the Non-Conformance.

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

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-001A	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-001B	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-001C	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-001C	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-001D	MW-306SAP-20150114-01	1/14/2015 8:55:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-002A	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-002B	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-002C	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-002C	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-002D	MW-504BR-20150114-01	1/14/2015 8:58:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-003A	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-003B	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-003B	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/22/2015
1501A32-003C	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-003C	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-003D	MW-511BR-20150114-01	1/14/2015 9:05:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-004A	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-004B	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-004B	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-004B	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/20/2015
1501A32-004C	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-004C	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-004D	MW-500BR-20150114-01	1/14/2015 9:45:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-005A	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-005B	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-005B	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-005B	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/20/2015
1501A32-005C	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-005C	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-005D	MW-600-20150114-01	1/14/2015 10:00:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-006A	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-006B	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-006B	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/20/2015
1501A32-006C	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-006C	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-006D	MW-510BR-20150114-01	1/14/2015 10:35:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-007A	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-007B	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-007C	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-007C	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-007D	MW-306BR-20150114-01	1/14/2015 10:50:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-008A	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-008B	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-008B	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-008B	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/21/2015
1501A32-008C	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-008C	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-008D	MW-601-20150114-01	1/14/2015 11:10:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-009A	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-009B	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-009C	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-009C	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-009D	MW-513BR-20150114-01	1/14/2015 11:15:00AM	Groundwater	Total Cyanide		1/16/2015 11:00:00 AM	01/16/2015
1501A32-010A	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-010B	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-010C	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-010C	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-010C	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-010D	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-010D	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-010E	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-010F	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-010G	MW-12-20150114-01	1/14/2015 2:23:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-011A	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-011B	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-011C	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-011D	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-011D	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-011E	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-011F	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-011G	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-011G	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	ION SCAN			01/16/2015
1501A32-011H	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-011H	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-011H	MW-401D-20150114-01	1/14/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-012A	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-012B	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-012C	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-012D	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-012D	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-012E	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-012F	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-012G	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-012H	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Alkalinity			01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-012H	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-012H	MW-206-20150114-01	1/14/2015 2:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-013A	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/19/2015
1501A32-013B	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-013C	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/18/2015
1501A32-013D	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-013D	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-013E	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Total Cyanide		1/23/2015 11:00:00 AM	01/23/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-013F	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-013G	MW-319-20150114-01	1/14/2015 2:35:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-014A	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-014B	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-014C	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/16/2015 1:00:00 PM	01/19/2015
1501A32-014D	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-014D	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-014E	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-014F	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-014G	MW-318-20150114-01	1/14/2015 2:45:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-015A	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-015B	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:53:08 PM	01/15/2015
1501A32-015C	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-015D	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-015D	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-015E	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-015F	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-015G	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-015H	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-015H	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-015H	MW-203-20150114-01	1/14/2015 3:50:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-016A	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-016B	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-016C	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-016D	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-016D	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-016E	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-016F	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-016G	MW-512BR-20150114-01	1/14/2015 4:20:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-017A	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-017B	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-017C	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-017D	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-017D	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-017E	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-017F	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-017G	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-017H	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-017H	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-017H	MW-404DR-20150114-01	1/14/2015 4:30:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-018A	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-018B	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-018C	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-018D	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/22/2015
1501A32-018D	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-018E	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-018F	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-018G	MW-19-20150114-01	1/14/2015 4:45:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-019A	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-019B	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-019C	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-019D	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-019D	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-019E	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Alkalinity			01/20/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Ferrous Iron			01/15/2015
1501A32-019F	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-019G	MW-401SAP-20150114-01	1/14/2015 5:25:00PM	Groundwater	ION SCAN			01/15/2015
1501A32-020A	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/19/2015 9:34:00 PM	01/20/2015
1501A32-020B	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-020C	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A32-020C	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/22/2015
1501A32-020D	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 1:10:00 PM	01/23/2015
1501A32-020D	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A32-020E	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Alkalinity			01/20/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A32

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Ferrous Iron			01/15/2015
1501A32-020F	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A32-020G	DUP-03-20150114-01	1/14/2015 12:00:00AM	Groundwater	ION SCAN			01/15/2015
1501A32-021A	TB-01	1/14/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:41:00 AM	01/19/2015
1501A32-023B	MW-319-20150115-01	1/15/2015 8:30:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A32-023G	MW-319-20150115-01	1/15/2015 8:30:00AM	Groundwater	ION SCAN			01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201751

Sample ID: **MB-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019659**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019660**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.0	4	200.0		55.0	45.1	115				

Sample ID: **LCSD-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019661**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	111.8	4	200.0		55.9	45.1	115	110.0	1.63	20	

Sample ID: **1501A32-017BMS**	Client ID: **MW-404DR-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019695**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	146.0	4	200.0		73.0	40.4	115				

Sample ID: **1501A32-017BMSD**	Client ID: **MW-404DR-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019696**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	126.2	4	200.0		63.1	40.4	115	146.0	14.5	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **MB-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013814**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013815**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	120.1	4	200.0		60.0	45.1	115				

Sample ID: **LCSD-201752**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013816**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	117.3	4	200.0		58.7	45.1	115	120.1	2.33	20	

Sample ID: **1501604-005BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013819**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.8	4	200.0	4.107	53.3	40.4	115				

Sample ID: **1501A32-013BMS**	Client ID: **MW-319-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**	
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019638**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	119.1	4	200.0		59.6	40.4	115				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201752

Sample ID: **1501604-005BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283724**	
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/15/2015**		Seq No: **6013820**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Methane	119.0	4	200.0	4.107	57.5	40.4	115	110.8	7.18	20

Sample ID: **1501A32-013BMSD**	Client ID: **MW-319-20150114-01**				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**	
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201752**		Analysis Date: **01/16/2015**		Seq No: **6019639**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Methane	122.2	4	200.0		61.1	40.4	115	119.1	2.55	20

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **MB-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017084**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	2.051	0	2.000		103	55.4	136				

Sample ID: **LCS-201771** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.615	0.50	2.000		80.7	66.3	118				
Acenaphthylene	1.412	1.0	2.000		70.6	64	120				
Anthracene	1.567	0.050	2.000		78.3	64.6	127				
Benz(a)anthracene	1.684	0.050	2.000		84.2	60.6	137				
Benzo(a)pyrene	1.620	0.050	2.000		81.0	64	124				
Benzo(b)fluoranthene	1.994	0.10	2.000		99.7	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **LCS-201771**	Client ID:		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283858**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201771**	Analysis Date: **01/18/2015**	Seq No: **6017085**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.879	0.10	2.000		93.9	49.9	137				
Benzo(k)fluoranthene	1.696	0.050	2.000		84.8	61.7	137				
Chrysene	1.755	0.050	2.000		87.7	65.5	127				
Dibenz(a,h)anthracene	1.928	0.10	2.000		96.4	52.4	130				
Fluoranthene	1.758	0.10	2.000		87.9	67	131				
Fluorene	1.609	0.10	2.000		80.5	68.3	120				
Indeno(1,2,3-cd)pyrene	1.863	0.050	2.000		93.1	50.4	139				
Naphthalene	1.550	0.50	2.000		77.5	61.1	120				
Phenanthrene	1.653	0.050	2.000		82.6	68	119				
Pyrene	1.681	0.050	2.000		84.0	62	127				
Surr: 4-Terphenyl-d14	1.781	0	2.000		89.0	55.4	136				

Sample ID: **1501A32-013CMS**	Client ID: **MW-319-20150114-01**		Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283858**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201771**	Analysis Date: **01/18/2015**	Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.525	0.50	2.000		76.2	45.6	120				
Acenaphthylene	1.303	1.0	2.000		65.1	48.3	124				
Anthracene	1.448	0.050	2.000		72.4	57.7	124				
Benz(a)anthracene	1.462	0.050	2.000	0.01370	72.4	50.3	143				
Benzo(a)pyrene	1.499	0.050	2.000	0.01619	74.2	44.2	127				
Benzo(b)fluoranthene	1.875	0.10	2.000	0.02263	92.6	48.4	125				
Benzo(g,h,i)perylene	1.815	0.10	2.000	0.03551	89.0	40.2	122				
Benzo(k)fluoranthene	1.724	0.050	2.000	0.01689	85.4	45.5	122				
Chrysene	1.674	0.050	2.000	0.01554	82.9	46	124				
Dibenz(a,h)anthracene	1.734	0.10	2.000	0.02836	85.3	40.1	128				
Fluoranthene	1.620	0.10	2.000	0.01414	80.3	58	127				
Fluorene	1.497	0.10	2.000		74.8	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201771

Sample ID: **1501A32-013CMS** Client ID: **MW-319-20150114-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017091**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.776	0.050	2.000	0.02686	87.5	40.3	129				
Naphthalene	1.598	0.50	2.000	0.1289	73.5	46.6	120				
Phenanthrene	1.550	0.050	2.000	0.01511	76.8	50.6	122				
Pyrene	1.613	0.050	2.000		80.6	50.1	128				
Surr: 4-Terphenyl-d14	1.597	0	2.000		79.9	55.4	136				

Sample ID: **1501A32-013CMSD** Client ID: **MW-319-20150114-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283858**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201771** Analysis Date: **01/18/2015** Seq No: **6017101**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.451	0.50	2.000		72.5	45.6	120	1.525	4.98	29.4	
Acenaphthylene	1.230	1.0	2.000		61.5	48.3	124	1.303	5.79	32.5	
Anthracene	1.412	0.050	2.000		70.6	57.7	124	1.448	2.56	21.9	
Benz(a)anthracene	1.493	0.050	2.000	0.01370	73.9	50.3	143	1.462	2.06	26.8	
Benzo(a)pyrene	1.445	0.050	2.000	0.01619	71.5	44.2	127	1.499	3.66	40.9	
Benzo(b)fluoranthene	1.808	0.10	2.000	0.02263	89.3	48.4	125	1.875	3.61	24.2	
Benzo(g,h,i)perylene	1.640	0.10	2.000	0.03551	80.2	40.2	122	1.815	10.2	26.2	
Benzo(k)fluoranthene	1.638	0.050	2.000	0.01689	81.1	45.5	122	1.724	5.11	23.3	
Chrysene	1.675	0.050	2.000	0.01554	83.0	46	124	1.674	0.033	25	
Dibenz(a,h)anthracene	1.636	0.10	2.000	0.02836	80.4	40.1	128	1.734	5.85	23.6	
Fluoranthene	1.604	0.10	2.000	0.01414	79.5	58	127	1.620	1.01	23.5	
Fluorene	1.439	0.10	2.000		71.9	52.6	124	1.497	3.94	31.5	
Indeno(1,2,3-cd)pyrene	1.645	0.050	2.000	0.02686	80.9	40.3	129	1.776	7.67	28.8	
Naphthalene	1.474	0.50	2.000	0.1289	67.2	46.6	120	1.598	8.11	22.9	
Phenanthrene	1.524	0.050	2.000	0.01511	75.4	50.6	122	1.550	1.74	20.2	
Pyrene	1.553	0.050	2.000		77.6	50.1	128	1.613	3.79	24.7	
Surr: 4-Terphenyl-d14	1.616	0	2.000		80.8	55.4	136	1.597	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **MB-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014981**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	42.70	0	50.00		85.4	70.6	123				
Surr: Dibromofluoromethane	54.98	0	50.00		110	78.7	124				
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120				

Sample ID: **LCS-201805** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6014963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.66	5.0	50.00		93.3	72.8	128				
Toluene	46.50	5.0	50.00		93.0	74.9	127				
Trichloroethene	49.63	5.0	50.00		99.3	70.5	134				
Surr: 4-Bromofluorobenzene	40.51	0	50.00		81.0	70.6	123				
Surr: Dibromofluoromethane	50.05	0	50.00		100	78.7	124				
Surr: Toluene-d8	46.15	0	50.00		92.3	81.3	120				

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.43	5.0	50.00		105	70	135				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201805

Sample ID: **1501934-001AMS** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	51.66	5.0	50.00		103	70.5	137				
Trichloroethene	52.57	5.0	50.00		105	71.8	139				
Surr: 4-Bromofluorobenzene	37.51	0	50.00		75.0	70.6	123				
Surr: Dibromofluoromethane	48.86	0	50.00		97.7	78.7	124				
Surr: Toluene-d8	47.61	0	50.00		95.2	81.3	120				

Sample ID: **1501934-001AMSD** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283753**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201805** Analysis Date: **01/16/2015** Seq No: **6016674**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	53.44	5.0	50.00		107	70	135	52.43	1.91	20	
Toluene	52.74	5.0	50.00		105	70.5	137	51.66	2.07	20	
Trichloroethene	53.90	5.0	50.00		108	71.8	139	52.57	2.50	20	
Surr: 4-Bromofluorobenzene	37.47	0	50.00		74.9	70.6	123	37.51	0	0	
Surr: Dibromofluoromethane	49.24	0	50.00		98.5	78.7	124	48.86	0	0	
Surr: Toluene-d8	45.13	0	50.00		90.3	81.3	120	47.61	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **MB-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023767**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.937	0	2.000		96.8	55.4	136				

Sample ID: **LCS-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	2.125	0.50	2.000		106	66.3	118				
Acenaphthylene	1.929	1.0	2.000		96.5	64	120				
Anthracene	2.040	0.050	2.000		102	64.6	127				
Benz(a)anthracene	2.139	0.050	2.000		107	60.6	137				
Benzo(a)pyrene	1.942	0.050	2.000	0.01083	96.5	64	124				
Benzo(b)fluoranthene	2.185	0.10	2.000	0.01266	109	56.4	133				

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **LCS-201811**	Client ID:		Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **284122**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201811**	Analysis Date: **01/21/2015**	Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.938	0.10	2.000	0.02005	95.9	49.9	137				
Benzo(k)fluoranthene	1.948	0.050	2.000	0.009700	96.9	61.7	137				
Chrysene	2.081	0.050	2.000		104	65.5	127				
Dibenz(a,h)anthracene	2.071	0.10	2.000	0.02390	102	52.4	130				
Fluoranthene	2.147	0.10	2.000		107	67	131				
Fluorene	2.000	0.10	2.000		100	68.3	120				
Indeno(1,2,3-cd)pyrene	2.134	0.050	2.000	0.02249	106	50.4	139				
Naphthalene	1.984	0.50	2.000		99.2	61.1	120				
Phenanthrene	1.886	0.050	2.000	0.01169	93.7	68	119				
Pyrene	1.955	0.050	2.000		97.7	62	127				
Surr: 4-Terphenyl-d14	1.988	0	2.000		99.4	55.4	136				

Sample ID: **1501A32-015CMS**	Client ID: **MW-203-20150114-01**		Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **284122**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201811**	Analysis Date: **01/21/2015**	Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.761	0.50	2.000		88.1	45.6	120				
Acenaphthylene	1.710	1.0	2.000		85.5	48.3	124				
Anthracene	1.799	0.050	2.000		89.9	57.7	124				
Benz(a)anthracene	1.997	0.050	2.000		99.8	50.3	143				
Benzo(a)pyrene	1.772	0.050	2.000		88.6	44.2	127				
Benzo(b)fluoranthene	2.008	0.10	2.000		100	48.4	125				
Benzo(g,h,i)perylene	1.902	0.10	2.000		95.1	40.2	122				
Benzo(k)fluoranthene	1.787	0.050	2.000		89.4	45.5	122				
Chrysene	1.916	0.050	2.000		95.8	46	124				
Dibenz(a,h)anthracene	2.090	0.10	2.000		105	40.1	128				
Fluoranthene	1.987	0.10	2.000		99.4	58	127				
Fluorene	1.797	0.10	2.000		89.9	52.6	124				

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **1501A32-015CMS** Client ID: **MW-203-20150114-01** Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.971	0.050	2.000		98.5	40.3	129				
Naphthalene	1.742	0.50	2.000		87.1	46.6	120				
Phenanthrene	1.696	0.050	2.000		84.8	50.6	122				
Pyrene	1.727	0.050	2.000		86.3	50.1	128				
Surr: 4-Terphenyl-d14	1.824	0	2.000		91.2	55.4	136				

Sample ID: **1501A32-015CMSD** Client ID: **MW-203-20150114-01** Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023770**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.901	0.50	2.000		95.1	45.6	120	1.761	7.66	29.4	
Acenaphthylene	1.817	1.0	2.000		90.9	48.3	124	1.710	6.09	32.5	
Anthracene	1.990	0.050	2.000		99.5	57.7	124	1.799	10.1	21.9	
Benz(a)anthracene	2.062	0.050	2.000		103	50.3	143	1.997	3.21	26.8	
Benzo(a)pyrene	1.848	0.050	2.000		92.4	44.2	127	1.772	4.19	40.9	
Benzo(b)fluoranthene	2.135	0.10	2.000		107	48.4	125	2.008	6.14	24.2	
Benzo(g,h,i)perylene	1.969	0.10	2.000		98.5	40.2	122	1.902	3.48	26.2	
Benzo(k)fluoranthene	1.899	0.050	2.000		94.9	45.5	122	1.787	6.04	23.3	
Chrysene	2.040	0.050	2.000		102	46	124	1.916	6.28	25	
Dibenz(a,h)anthracene	2.044	0.10	2.000		102	40.1	128	2.090	2.26	23.6	
Fluoranthene	2.088	0.10	2.000		104	58	127	1.987	4.94	23.5	
Fluorene	1.938	0.10	2.000		96.9	52.6	124	1.797	7.54	31.5	
Indeno(1,2,3-cd)pyrene	2.044	0.050	2.000		102	40.3	129	1.971	3.64	28.8	
Naphthalene	1.823	0.50	2.000		91.1	46.6	120	1.742	4.52	22.9	
Phenanthrene	1.834	0.050	2.000		91.7	50.6	122	1.696	7.80	20.2	
Pyrene	1.901	0.050	2.000		95.1	50.1	128	1.727	9.63	24.7	
Surr: 4-Terphenyl-d14	2.116	0	2.000		106	55.4	136	1.824	0	0	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201831

Sample ID: **MB-201831**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6015967**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201831**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6015968**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2473	0.010	0.2500		98.9	90	110				

Sample ID: **1501895-010EMS**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6016007**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2686	0.010	0.2500		107	90	110				

Sample ID: **1501895-020EMS**	Client ID:				Units: **mg/L**		Prep Date: **01/16/2015**		Run No: **283812**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6016010**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2605	0.010	0.2500	0.007500	101	90	110				

Sample ID: **1501895-010EMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/15/2015**		Run No: **283812**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **201831**		Analysis Date: **01/16/2015**		Seq No: **6016009**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2680	0.010	0.2500		107	90	110	0.2686	0.224	20	

Qualifiers:

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

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201897

Sample ID: **MB-201897** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **283920**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201897** Analysis Date: **01/19/2015** Seq No: **6018458**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	46.86	0	50.00		93.7	70.6	123				
Surr: Dibromofluoromethane	49.02	0	50.00		98.0	78.7	124				
Surr: Toluene-d8	48.00	0	50.00		96.0	81.3	120				

Sample ID: **LCS-201897** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **283920**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201897** Analysis Date: **01/19/2015** Seq No: **6018457**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	45.35	5.0	50.00		90.7	72.8	128				
Toluene	45.71	5.0	50.00		91.4	74.9	127				
Trichloroethene	47.43	5.0	50.00		94.9	70.5	134				
Surr: 4-Bromofluorobenzene	47.37	0	50.00		94.7	70.6	123				
Surr: Dibromofluoromethane	48.75	0	50.00		97.5	78.7	124				
Surr: Toluene-d8	48.44	0	50.00		96.9	81.3	120				

Sample ID: **1501A32-013AMS** Client ID: **MW-319-20150114-01** Units: **ug/L** Prep Date: **01/19/2015** Run No: **283921**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201897** Analysis Date: **01/20/2015** Seq No: **6019648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.11	5.0	50.00		94.2	70	135				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201897

Sample ID: **1501A32-013AMS**	Client ID: **MW-319-20150114-01**	Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **283921**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201897**	Analysis Date: **01/20/2015**	Seq No: **6019648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	48.11	5.0	50.00		96.2	70.5	137				
Trichloroethene	49.32	5.0	50.00		98.6	71.8	139				
Surr: 4-Bromofluorobenzene	47.46	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	49.48	0	50.00		99.0	78.7	124				
Surr: Toluene-d8	47.96	0	50.00		95.9	81.3	120				

Sample ID: **1501A32-013AMSD**	Client ID: **MW-319-20150114-01**	Units: **ug/L**	Prep Date: **01/19/2015**	Run No: **283921**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201897**	Analysis Date: **01/20/2015**	Seq No: **6019649**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	45.92	5.0	50.00		91.8	70	135	47.11	2.56	20	
Toluene	46.84	5.0	50.00		93.7	70.5	137	48.11	2.68	20	
Trichloroethene	48.20	5.0	50.00		96.4	71.8	139	49.32	2.30	20	
Surr: 4-Bromofluorobenzene	47.53	0	50.00		95.1	70.6	123	47.46	0	0	
Surr: Dibromofluoromethane	49.10	0	50.00		98.2	78.7	124	49.48	0	0	
Surr: Toluene-d8	47.71	0	50.00		95.4	81.3	120	47.96	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201942

Sample ID: **MB-201942**	Client ID:			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201942**	Client ID:			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020783**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2659	0.010	0.2500		106	90	110				

Sample ID: **1501A32-010EMS**	Client ID: **MW-12-20150114-01**			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2653	0.010	0.2500	0.008100	103	90	110				

Sample ID: **1501A32-020EMS**	Client ID: **DUP-03-20150114-01**			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020805**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1988	0.010	0.2500	0.01230	74.6	90	110				S

Sample ID: **1501A32-010EMSD**	Client ID: **MW-12-20150114-01**			Units: **mg/L**	Prep Date: **01/20/2015**	Run No: **283993**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**			BatchID: **201942**	Analysis Date: **01/20/2015**	Seq No: **6020804**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2645	0.010	0.2500	0.008100	103	90	110	0.2653	0.302	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201962

Sample ID: **MB-201962**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023127**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201962**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023128**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004910	0.00020	0.0050	0.00004380	97.3	80	120				

Sample ID: **1501A32-001CMS**	Client ID: **MW-306SAP-20150114-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023130**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005203	0.00020	0.0050		104	70	130				

Sample ID: **1501A32-001CMSD**	Client ID: **MW-306SAP-20150114-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284098**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **201962**		Analysis Date: **01/21/2015**		Seq No: **6023131**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005216	0.00020	0.0050		104	70	130	0.005203	0.234	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201985

Sample ID: **MB-201985** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026183**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201985** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026184**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.038	0.0200	1.000		104	80	120				
Arsenic	1.016	0.0500	1.000		102	80	120				
Barium	1.025	0.0200	1.000	0.002356	102	80	120				
Beryllium	1.025	0.0100	1.000		103	80	120				
Cadmium	1.022	0.0050	1.000		102	80	120				
Chromium	1.009	0.0100	1.000		101	80	120				
Copper	0.9900	0.0100	1.000		99.0	80	120				
Lead	1.021	0.0100	1.000		102	80	120				
Nickel	1.020	0.0200	1.000		102	80	120				
Selenium	1.013	0.0200	1.000		101	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201985

Sample ID: **LCS-201985** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026184**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	1.005	0.0200	1.000		100	80	120				
Vanadium	1.018	0.0100	1.000		102	80	120				
Zinc	1.023	0.0200	1.000		102	80	120				

Sample ID: **1501A32-018DMS** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026186**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.029	0.0200	1.000		103	75	125				
Arsenic	1.024	0.0500	1.000		102	75	125				
Barium	1.073	0.0200	1.000	0.08241	99.1	75	125				
Beryllium	1.003	0.0100	1.000		100	75	125				
Cadmium	1.010	0.0050	1.000	0.0009736	101	75	125				
Chromium	0.9874	0.0100	1.000	0.003774	98.4	75	125				
Copper	0.9681	0.0100	1.000		96.8	75	125				
Lead	0.9820	0.0100	1.000		98.2	75	125				
Nickel	1.007	0.0200	1.000	0.02747	98.0	75	125				
Selenium	1.015	0.0200	1.000	0.01408	100	75	125				
Thallium	0.9844	0.0200	1.000		98.4	75	125				
Vanadium	0.9978	0.0100	1.000	0.0009134	99.7	75	125				
Zinc	1.068	0.0200	1.000	0.07467	99.3	75	125				

Sample ID: **1501A32-018DMSD** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026187**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.029	0.0200	1.000		103	75	125	1.029	0.005	20	
Arsenic	1.011	0.0500	1.000		101	75	125	1.024	1.29	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 201985

Sample ID: **1501A32-018DMSD** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: **01/21/2015** Run No: **284234**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **201985** Analysis Date: **01/22/2015** Seq No: **6026187**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	1.063	0.0200	1.000	0.08241	98.0	75	125	1.073	1.01	20	
Beryllium	0.9879	0.0100	1.000		98.8	75	125	1.003	1.49	20	
Cadmium	1.003	0.0050	1.000	0.0009736	100	75	125	1.010	0.667	20	
Chromium	0.9751	0.0100	1.000	0.003774	97.1	75	125	0.9874	1.25	20	
Copper	0.9512	0.0100	1.000		95.1	75	125	0.9681	1.77	20	
Lead	0.9685	0.0100	1.000		96.9	75	125	0.9820	1.39	20	
Nickel	0.9952	0.0200	1.000	0.02747	96.8	75	125	1.007	1.21	20	
Selenium	1.012	0.0200	1.000	0.01408	99.8	75	125	1.015	0.326	20	
Thallium	0.9721	0.0200	1.000		97.2	75	125	0.9844	1.26	20	
Vanadium	0.9820	0.0100	1.000	0.0009134	98.1	75	125	0.9978	1.60	20	
Zinc	1.050	0.0200	1.000	0.07467	97.5	75	125	1.068	1.67	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: 202068

Sample ID: **MB-202068**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025520**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202068**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025521**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2467	0.010	0.2500		98.7	90	110				

Sample ID: **1501B94-002CMS**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025529**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2311	0.010	0.2500		92.4	90	110				

Sample ID: **1501C78-005CMS**	Client ID:				Units: **mg/L**		Prep Date: **01/23/2015**		Run No: **284214**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/23/2015**		Seq No: **6027362**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1643	0.010	0.2500	0.005400	63.6	90	110				S

Sample ID: **1501B94-002CMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284214**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202068**		Analysis Date: **01/22/2015**		Seq No: **6025530**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2305	0.010	0.2500		92.2	90	110	0.2311	0.260	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283868

Sample ID: **MB-R283868** Client ID: Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MBLK** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017295**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283868** Client ID: Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **LCS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017296**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4832	0.100	0.5000		96.6	85	115				

Sample ID: **1501A32-013FMS** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017310**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	1.300	0.200	1.000	0.3644	93.6	80	120				

Sample ID: **1501A32-018FMS** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MS** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017308**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4667	0.100	0.5000		93.3	80	120				

Sample ID: **1501A32-013FMSD** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MSD** TestCode: **Ferrous Iron** **SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017311**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	1.251	0.200	1.000	0.3644	88.6	80	120	1.300	3.86	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283868

Sample ID: **1501A32-018FMSD** Client ID: **MW-19-20150114-01** Units: **mg/L** Prep Date: Run No: **283868**
SampleType: **MSD** TestCode: **Ferrous Iron SM3500-Fe-B** BatchID: **R283868** Analysis Date: **01/15/2015** Seq No: **6017309**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4996	0.100	0.5000		99.9	80	120	0.4667	6.81	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283938

Sample ID: **MB-R283938** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019067**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R283938** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.138	0.25	5.000		103	90	110				
Sulfate	26.53	1.0	25.00		106	90	110				

Sample ID: **1501A32-013GMS** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/16/2015** Seq No: **6019140**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	3.921	0.25	5.000		78.4	90	110				S
Sulfate	44.06	1.0	25.00	22.32	87.0	90	110				S

Sample ID: **1501A43-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019070**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	57.71	2.5	50.00	9.168	97.1	90	110				
Sulfate	304.1	10	250.0	55.76	99.3	90	110				

Sample ID: **1501A44-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	57.10	2.5	50.00	6.165	102	90	110				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R283938

Sample ID: **1501A44-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	294.9	10	250.0	39.21	102	90	110				

Sample ID: **1501A32-013GMSD** Client ID: **MW-319-20150114-01** Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/16/2015** Seq No: **6019141**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	3.953	0.25	5.000		79.1	90	110	3.921	0.825	20	S
Sulfate	44.13	1.0	25.00	22.32	87.2	90	110	44.06	0.147	20	S

Sample ID: **1501A43-002BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **283938**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R283938** Analysis Date: **01/15/2015** Seq No: **6019071**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	58.18	2.5	50.00	9.168	98.0	90	110	57.71	0.813	20	
Sulfate	297.5	10	250.0	55.76	96.7	90	110	304.1	2.20	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R284171

Sample ID: **MB-R284171**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284171**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284171**	Analysis Date: **01/21/2015**	Seq No: **6024649**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501A32-010FDUP**	Client ID: **MW-12-20150114-01**		Units: **mg/L**	Prep Date:	Run No: **284171**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284171**	Analysis Date: **01/21/2015**	Seq No: **6024667**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	3.030	1.00						3.020	0.331	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A32

ANALYTICAL QC SUMMARY REPORT

BatchID: R284335

Sample ID: **MB-R284335**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028150**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501B40-001GDUP**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	7.710	1.00						7.730	0.259	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 26, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501A82

Analytical Environmental Services, Inc. received 10 samples on 1/15/2015 4:30:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501A82

Date: 01-15-2015 Page 1 of 1

COMPANY:	ADDRESS:
ENVIRONMENTAL RESOURCES MANAGEMENT	5200 WINDY HILL ROSE 1600 W ATLANTA, GA 30339
PHONE: (678) 486-2700	FAX:
SAMPLED BY: C. BROOKS, R. MAYETTE, A. NEAL, A. SOLOMOSTS, W. VARLO	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC 8260B	SVOC 8270C	METALS: HG	CYANIDE (total)	GASES DSK-175	FERROUS FE SM3500	SULFATE/NITRATES 9056	CO2 + O2	PRESERVATION (See codes) H	NaOH	N	NaOH	NA	NA	NA	NA	REMARKS	No # of Containers
1	MW-509BR-20150115-01	01/15/2015	08:55	X		Air	Z	Z	1	1	Z	1	1	1										4
2	MW-509D-20150115-01	"	10:00																					11
3	MW-507BR-20150115-01	"	10:35																					10
4	MW-505-20150115-01	"	11:00																					11
5	MW-402S-20150115-01	"	11:05																					60
6	MW-402BR-20150115-01	"	11:25																				Only MNA.	12
7	MW-505BR-20150115-01	"	12:10																					10
8	MW-304-20150115-01	"	12:15																					11
9	MW-402S-20150115-01 DD	"	12:20																					6
10	TB-01	NA	NA																					2
11																								
12																								
13																								
14																								

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Charles Brooks	1-15-15 14:50	1:	01-15-2015 7:52 PM
2: 01-15-2015 4:30PM		2: Loana Pacurar	1/15/15 1630
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Hall Kilpatrick

PROJECT #: 0230712.52

SITE ADDRESS: 812 8th St Augusta, GA 30901

SEND REPORT TO: greg.jirak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 82

Turnaround Time Request
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):

E-mail? (Y) N: Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL (COURIER)

GREYHOUND OTHER

SAMPLES RECEIVED AFTER 5PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 27-Jan-15

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501A82

Case Narrative

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. F fraction samples were analyzed in the laboratory which is a deviation from the method.

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-509BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 8:55:00 AM
Lab ID:	1501A82-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/19/2015 09:06	GK
Benzene	2500	250		ug/L	201847	50	01/17/2015 14:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Ethylbenzene	260	250		ug/L	201847	50	01/17/2015 14:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Toluene	460	250		ug/L	201847	50	01/17/2015 14:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Xylenes, Total	160	5.0		ug/L	201847	1	01/19/2015 09:06	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	201847	50	01/17/2015 14:14	GK
Surr: 4-Bromofluorobenzene	99.7	70.6-123		%REC	201847	1	01/19/2015 09:06	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201847	50	01/17/2015 14:14	GK
Surr: Dibromofluoromethane	98.7	78.7-124		%REC	201847	1	01/19/2015 09:06	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201847	50	01/17/2015 14:14	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	201847	1	01/19/2015 09:06	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	810	50		ug/L	201811	100	01/22/2015 13:07	YH
Acenaphthylene	8.0	1.0		ug/L	201811	1	01/21/2015 17:37	YH
Acenaphthene	16	5.0		ug/L	201811	10	01/22/2015 11:47	YH
Fluorene	6.5	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Phenanthrene	7.9	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Anthracene	0.91	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Fluoranthene	0.45	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Pyrene	0.52	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 17:37	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 17:37	YH
Surr: 4-Terphenyl-d14	96.5	55.4-136		%REC	201811	1	01/21/2015 17:37	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:28	TA
ION SCAN SW9056A								

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-509BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 8:55:00 AM
Lab ID:	1501A82-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 11:29	JW
Sulfate	4.6	1.0		mg/L	R283956	1	01/16/2015 11:29	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	980	40		ug/L	201751	10	01/16/2015 12:49	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.68	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	47.1	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:04	JL
Barium	0.128	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:04	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:04	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:04	JL
Zinc	0.109	0.0200		mg/L	201979	1	01/21/2015 22:04	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-505D-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:00:00 AM
Lab ID:	1501A82-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 14:44	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Ethylbenzene	13	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Xylenes, Total	6.8	5.0		ug/L	201847	1	01/17/2015 14:44	GK
Surr: 4-Bromofluorobenzene	98.3	70.6-123		%REC	201847	1	01/17/2015 14:44	GK
Surr: Dibromofluoromethane	99.3	78.7-124		%REC	201847	1	01/17/2015 14:44	GK
Surr: Toluene-d8	96.6	81.3-120		%REC	201847	1	01/17/2015 14:44	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	4.2	0.50		ug/L	201926	1	01/21/2015 16:30	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 16:30	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 16:30	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(a)pyrene	0.051	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Indeno(1,2,3-cd)pyrene	0.10	0.050		ug/L	201926	1	01/21/2015 16:30	YH
Dibenz(a,h)anthracene	0.11	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Benzo(g,h,i)perylene	0.11	0.10		ug/L	201926	1	01/21/2015 16:30	YH
Surr: 4-Terphenyl-d14	90.8	55.4-136		%REC	201926	1	01/21/2015 16:30	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:30	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 11:44	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 11:44	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-505D-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:00:00 AM
Lab ID:	1501A82-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	9800	400		ug/L	201751	100	01/16/2015 12:58	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	23.4	2.50		mg/L	R283869	25	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.58	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	499	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:08	JL
Barium	0.342	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:08	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:08	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:08	JL
Zinc	0.0202	0.0200		mg/L	201979	1	01/21/2015 22:08	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-507BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:35:00 AM
Lab ID:	1501A82-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 15:14	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 15:14	GK
Surr: 4-Bromofluorobenzene	95	70.6-123		%REC	201847	1	01/17/2015 15:14	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201847	1	01/17/2015 15:14	GK
Surr: Toluene-d8	97.9	81.3-120		%REC	201847	1	01/17/2015 15:14	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201926	1	01/21/2015 16:55	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 16:55	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 16:55	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Indeno(1,2,3-cd)pyrene	0.072	0.050		ug/L	201926	1	01/21/2015 16:55	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 16:55	YH
Surr: 4-Terphenyl-d14	93.1	55.4-136		%REC	201926	1	01/21/2015 16:55	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:32	TA
ION SCAN SW9056A								
Nitrate	0.61	0.25		mg/L	R283956	1	01/16/2015 12:37	JW
Sulfate	38	1.0		mg/L	R283956	1	01/16/2015 12:37	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-507BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 10:35:00 AM
Lab ID:	1501A82-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 12:14	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.16	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	56.6	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:12	JL
Barium	0.0698	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:12	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:12	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:12	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-501S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:00:00 AM
Lab ID:	1501A82-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 15:44	GK
Benzene	35	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Ethylbenzene	5.3	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Toluene	7.4	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 15:44	GK
Surr: 4-Bromofluorobenzene	97.7	70.6-123		%REC	201847	1	01/17/2015 15:44	GK
Surr: Dibromofluoromethane	98.4	78.7-124		%REC	201847	1	01/17/2015 15:44	GK
Surr: Toluene-d8	96.2	81.3-120		%REC	201847	1	01/17/2015 15:44	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	5.0	0.50		ug/L	201811	1	01/21/2015 18:03	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 18:03	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 18:03	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:03	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 18:03	YH
Surr: 4-Terphenyl-d14	87.8	55.4-136		%REC	201811	1	01/21/2015 18:03	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:38	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 13:36	JW
Sulfate	61	1.0		mg/L	R283956	1	01/16/2015 13:36	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-501S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:00:00 AM
Lab ID:	1501A82-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 12:23	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.62	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	323	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:22	JL
Barium	0.103	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Cadmium	0.0153	0.0050		mg/L	201979	1	01/21/2015 22:22	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:22	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:22	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:08:00 AM
Lab ID:	1501A82-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 16:14	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 16:14	GK
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	201847	1	01/17/2015 16:14	GK
Surr: Dibromofluoromethane	100	78.7-124		%REC	201847	1	01/17/2015 16:14	GK
Surr: Toluene-d8	97.1	81.3-120		%REC	201847	1	01/17/2015 16:14	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201811	1	01/21/2015 18:30	YH
Acenaphthylene	BRL	1.0		ug/L	201811	1	01/21/2015 18:30	YH
Acenaphthene	BRL	0.50		ug/L	201811	1	01/21/2015 18:30	YH
Fluorene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Phenanthrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Pyrene	0.064	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Benz(a)anthracene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Chrysene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201811	1	01/21/2015 18:30	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201811	1	01/21/2015 18:30	YH
Surr: 4-Terphenyl-d14	99.4	55.4-136		%REC	201811	1	01/21/2015 18:30	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:40	TA
ION SCAN SW9056A								
Nitrate	2.5	0.25		mg/L	R283956	1	01/16/2015 13:51	JW
Sulfate	62	1.0		mg/L	R283956	1	01/16/2015 13:51	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401S-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:08:00 AM
Lab ID:	1501A82-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	201751	1	01/16/2015 12:28	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.46	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	168	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:26	JL
Barium	0.112	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:26	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:26	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:26	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408DR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 11:25:00 AM
Lab ID:	1501A82-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 14:05	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 14:05	JW
GC Analysis of Gaseous Samples SOP-RSK 175 (RSK175)								
Methane	6600	400		ug/L	201751	100	01/16/2015 13:04	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	3.85	1.00		mg/L	R283869	10	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.78	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	137	10.0		mg/L	R283971	1	01/20/2015 00:00	TL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-508BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:10:00 PM
Lab ID:	1501A82-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 16:44	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 16:44	GK
Surr: 4-Bromofluorobenzene	94.8	70.6-123		%REC	201847	1	01/17/2015 16:44	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201847	1	01/17/2015 16:44	GK
Surr: Toluene-d8	97.1	81.3-120		%REC	201847	1	01/17/2015 16:44	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	201942	1	01/20/2015 15:30	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201926	1	01/21/2015 17:21	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 17:21	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 17:21	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Indeno(1,2,3-cd)pyrene	0.067	0.050		ug/L	201926	1	01/21/2015 17:21	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 17:21	YH
Surr: 4-Terphenyl-d14	93.9	55.4-136		%REC	201926	1	01/21/2015 17:21	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:42	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 14:20	JW
Sulfate	4.5	1.0		mg/L	R283956	1	01/16/2015 14:20	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-508BR-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:10:00 PM
Lab ID:	1501A82-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	500	40		ug/L	201751	10	01/16/2015 13:10	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R283869	1	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.17	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	BRL	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:30	JL
Barium	0.614	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:30	JL
Chromium	0.0137	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:30	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:30	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-304-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:15:00 PM
Lab ID:	1501A82-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 17:14	GK
Benzene	27	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Xylenes, Total	9.6	5.0		ug/L	201847	1	01/17/2015 17:14	GK
Surr: 4-Bromofluorobenzene	97.8	70.6-123		%REC	201847	1	01/17/2015 17:14	GK
Surr: Dibromofluoromethane	99.7	78.7-124		%REC	201847	1	01/17/2015 17:14	GK
Surr: Toluene-d8	96.3	81.3-120		%REC	201847	1	01/17/2015 17:14	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/21/2015 14:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	27	5.0		ug/L	201926	10	01/22/2015 13:33	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 17:47	YH
Acenaphthene	31	5.0		ug/L	201926	10	01/22/2015 13:33	YH
Fluorene	4.4	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Phenanthrene	3.2	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Anthracene	0.54	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Fluoranthene	0.40	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Pyrene	0.42	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Indeno(1,2,3-cd)pyrene	0.064	0.050		ug/L	201926	1	01/21/2015 17:47	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 17:47	YH
Surr: 4-Terphenyl-d14	92.4	55.4-136		%REC	201926	1	01/21/2015 17:47	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:43	TA
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 14:35	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 14:35	JW

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-304-2015115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:15:00 PM
Lab ID:	1501A82-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	6700	400		ug/L	201751	100	01/16/2015 13:54	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	32.7	2.50		mg/L	R283869	25	01/16/2015 08:50	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.48	1.00	H	mg/L	R284171	1	01/21/2015 13:20	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	305	10.0		mg/L	R283971	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Arsenic	BRL	0.0500		mg/L	201979	1	01/21/2015 22:33	JL
Barium	0.324	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:33	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:33	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:33	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408S-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:20:00 PM
Lab ID:	1501A82-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201847	1	01/17/2015 17:43	GK
Benzene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Toluene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/17/2015 17:43	GK
Surr: 4-Bromofluorobenzene	95.5	70.6-123		%REC	201847	1	01/17/2015 17:43	GK
Surr: Dibromofluoromethane	99	78.7-124		%REC	201847	1	01/17/2015 17:43	GK
Surr: Toluene-d8	95.8	81.3-120		%REC	201847	1	01/17/2015 17:43	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/21/2015 14:45	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	201926	1	01/21/2015 18:12	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/21/2015 18:12	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/21/2015 18:12	YH
Fluorene	0.40	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Fluoranthene	0.26	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Pyrene	0.096	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/21/2015 18:12	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/21/2015 18:12	YH
Surr: 4-Terphenyl-d14	92.7	55.4-136		%REC	201926	1	01/21/2015 18:12	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	201963	1	01/21/2015 17:45	TA
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Arsenic	0.222	0.0500		mg/L	201979	1	01/21/2015 22:37	JL
Barium	0.444	0.0200		mg/L	201979	1	01/21/2015 22:37	JL

Qualifiers:

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- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-408S-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 12:20:00 PM
Lab ID:	1501A82-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Cadmium	BRL	0.0050		mg/L	201979	1	01/21/2015 22:37	JL
Chromium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Copper	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Lead	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Nickel	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Selenium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Thallium	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL
Vanadium	BRL	0.0100		mg/L	201979	1	01/21/2015 22:37	JL
Zinc	BRL	0.0200		mg/L	201979	1	01/21/2015 22:37	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501A82-010	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201847	1	01/16/2015 22:45	GK
Benzene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Carbon disulfide	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Ethylbenzene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Methylene chloride	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Toluene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Trichloroethene	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Xylenes, Total	BRL	5.0		ug/L	201847	1	01/16/2015 22:45	GK
Surr: 4-Bromofluorobenzene	94.7	70.6-123		%REC	201847	1	01/16/2015 22:45	GK
Surr: Dibromofluoromethane	98.1	78.7-124		%REC	201847	1	01/16/2015 22:45	GK
Surr: Toluene-d8	96.8	81.3-120		%REC	201847	1	01/16/2015 22:45	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1501A82

Checklist completed by Joana Pacurar 1/15/15
Signature Date

Carrier name: FedEx __ UPS __ Courier ✓ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.1°C Cooler #2 3.2°C Cooler #3 3.5°C Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by Dawn

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-001A	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-001A	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/19/2015
1501A82-001B	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-001C	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A82-001C	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/22/2015
1501A82-001D	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-001D	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-001E	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-001F	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-001G	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-001H	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-001H	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-001H	MW-509BR-2015115-01	1/15/2015 8:55:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-002A	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-002B	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-002C	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-002D	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-002D	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-002E	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-002F	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-002G	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-002H	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-002H	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-002H	MW-505D-2015115-01	1/15/2015 10:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-003A	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-003B	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-003C	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-003D	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-003D	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-003E	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-003F	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-003G	MW-507BR-2015115-01	1/15/2015 10:35:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-004A	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-004B	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-004C	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A82-004D	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-004D	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-004E	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-004F	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-004G	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-004H	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-004H	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-004H	MW-501S-2015115-01	1/15/2015 11:00:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-005A	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-005B	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-005C	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/19/2015 4:00:00 PM	01/21/2015
1501A82-005D	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-005D	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-005E	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-005F	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-005G	MW-401S-2015115-01	1/15/2015 11:08:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-006A	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Alkalinity			01/20/2015
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Ferrous Iron			01/16/2015
1501A82-006B	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-006C	MW-408DR-2015115-01	1/15/2015 11:25:00AM	Groundwater	ION SCAN			01/16/2015
1501A82-007A	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-007B	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-007C	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-007D	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-007D	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-007E	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Total Cyanide		1/20/2015 10:00:00 AM	01/20/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Alkalinity			01/20/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Ferrous Iron			01/16/2015
1501A82-007F	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-007G	MW-508BR-2015115-01	1/15/2015 12:10:00PM	Groundwater	ION SCAN			01/16/2015
1501A82-008A	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015
1501A82-008B	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	GC Analysis of Gaseous Samples		1/15/2015 12:52:41 PM	01/16/2015
1501A82-008C	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-008C	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/22/2015
1501A82-008D	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-008D	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-008E	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Total Cyanide		1/21/2015 10:45:00 AM	01/21/2015
1501A82-008F	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Ferrous Iron			01/16/2015
1501A82-008G	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	ION SCAN			01/16/2015
1501A82-008H	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Alkalinity			01/20/2015
1501A82-008H	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/21/2015
1501A82-008H	MW-304-2015115-01	1/15/2015 12:15:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501A82-009A	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/17/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501A82

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501A82-009B	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 12:00:00 PM	01/21/2015
1501A82-009C	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	TOTAL METALS BY ICP		1/21/2015 11:41:00 AM	01/21/2015
1501A82-009C	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	TOTAL MERCURY		1/21/2015 9:50:00 AM	01/21/2015
1501A82-009D	MW-408S-20150115-01	1/15/2015 12:20:00PM	Groundwater	Total Cyanide		1/21/2015 10:45:00 AM	01/21/2015
1501A82-010A	TB-01	1/15/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/16/2015 9:46:00 PM	01/16/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201751

Sample ID: **MB-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019659**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019660**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	110.0	4	200.0		55.0	45.1	115				

Sample ID: **LCSD-201751**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019661**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	111.8	4	200.0		55.9	45.1	115	110.0	1.63	20	

Sample ID: **1501A32-017BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019695**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	146.0	4	200.0		73.0	40.4	115				

Sample ID: **1501A32-017BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/15/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201751**		Analysis Date: **01/16/2015**		Seq No: **6019696**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	126.2	4	200.0		63.1	40.4	115	146.0	14.5	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **MB-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023767**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.937	0	2.000		96.8	55.4	136				

Sample ID: **LCS-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	2.125	0.50	2.000		106	66.3	118				
Acenaphthylene	1.929	1.0	2.000		96.5	64	120				
Anthracene	2.040	0.050	2.000		102	64.6	127				
Benz(a)anthracene	2.139	0.050	2.000		107	60.6	137				
Benzo(a)pyrene	1.942	0.050	2.000	0.01083	96.5	64	124				
Benzo(b)fluoranthene	2.185	0.10	2.000	0.01266	109	56.4	133				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **LCS-201811** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023768**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.938	0.10	2.000	0.02005	95.9	49.9	137				
Benzo(k)fluoranthene	1.948	0.050	2.000	0.009700	96.9	61.7	137				
Chrysene	2.081	0.050	2.000		104	65.5	127				
Dibenz(a,h)anthracene	2.071	0.10	2.000	0.02390	102	52.4	130				
Fluoranthene	2.147	0.10	2.000		107	67	131				
Fluorene	2.000	0.10	2.000		100	68.3	120				
Indeno(1,2,3-cd)pyrene	2.134	0.050	2.000	0.02249	106	50.4	139				
Naphthalene	1.984	0.50	2.000		99.2	61.1	120				
Phenanthrene	1.886	0.050	2.000	0.01169	93.7	68	119				
Pyrene	1.955	0.050	2.000		97.7	62	127				
Surr: 4-Terphenyl-d14	1.988	0	2.000		99.4	55.4	136				

Sample ID: **1501A32-015CMS** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.761	0.50	2.000		88.1	45.6	120				
Acenaphthylene	1.710	1.0	2.000		85.5	48.3	124				
Anthracene	1.799	0.050	2.000		89.9	57.7	124				
Benz(a)anthracene	1.997	0.050	2.000		99.8	50.3	143				
Benzo(a)pyrene	1.772	0.050	2.000		88.6	44.2	127				
Benzo(b)fluoranthene	2.008	0.10	2.000		100	48.4	125				
Benzo(g,h,i)perylene	1.902	0.10	2.000		95.1	40.2	122				
Benzo(k)fluoranthene	1.787	0.050	2.000		89.4	45.5	122				
Chrysene	1.916	0.050	2.000		95.8	46	124				
Dibenz(a,h)anthracene	2.090	0.10	2.000		105	40.1	128				
Fluoranthene	1.987	0.10	2.000		99.4	58	127				
Fluorene	1.797	0.10	2.000		89.9	52.6	124				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201811

Sample ID: **1501A32-015CMS** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023769**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.971	0.050	2.000		98.5	40.3	129				
Naphthalene	1.742	0.50	2.000		87.1	46.6	120				
Phenanthrene	1.696	0.050	2.000		84.8	50.6	122				
Pyrene	1.727	0.050	2.000		86.3	50.1	128				
Surr: 4-Terphenyl-d14	1.824	0	2.000		91.2	55.4	136				

Sample ID: **1501A32-015CMSD** Client ID: Units: **ug/L** Prep Date: **01/19/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201811** Analysis Date: **01/21/2015** Seq No: **6023770**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.901	0.50	2.000		95.1	45.6	120	1.761	7.66	29.4	
Acenaphthylene	1.817	1.0	2.000		90.9	48.3	124	1.710	6.09	32.5	
Anthracene	1.990	0.050	2.000		99.5	57.7	124	1.799	10.1	21.9	
Benz(a)anthracene	2.062	0.050	2.000		103	50.3	143	1.997	3.21	26.8	
Benzo(a)pyrene	1.848	0.050	2.000		92.4	44.2	127	1.772	4.19	40.9	
Benzo(b)fluoranthene	2.135	0.10	2.000		107	48.4	125	2.008	6.14	24.2	
Benzo(g,h,i)perylene	1.969	0.10	2.000		98.5	40.2	122	1.902	3.48	26.2	
Benzo(k)fluoranthene	1.899	0.050	2.000		94.9	45.5	122	1.787	6.04	23.3	
Chrysene	2.040	0.050	2.000		102	46	124	1.916	6.28	25	
Dibenz(a,h)anthracene	2.044	0.10	2.000		102	40.1	128	2.090	2.26	23.6	
Fluoranthene	2.088	0.10	2.000		104	58	127	1.987	4.94	23.5	
Fluorene	1.938	0.10	2.000		96.9	52.6	124	1.797	7.54	31.5	
Indeno(1,2,3-cd)pyrene	2.044	0.050	2.000		102	40.3	129	1.971	3.64	28.8	
Naphthalene	1.823	0.50	2.000		91.1	46.6	120	1.742	4.52	22.9	
Phenanthrene	1.834	0.050	2.000		91.7	50.6	122	1.696	7.80	20.2	
Pyrene	1.901	0.050	2.000		95.1	50.1	128	1.727	9.63	24.7	
Surr: 4-Terphenyl-d14	2.116	0	2.000		106	55.4	136	1.824	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201847

Sample ID: **MB-201847** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283836**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201847** Analysis Date: **01/16/2015** Seq No: **6016617**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.27	0	50.00		94.5	70.6	123				
Surr: Dibromofluoromethane	48.26	0	50.00		96.5	78.7	124				
Surr: Toluene-d8	48.41	0	50.00		96.8	81.3	120				

Sample ID: **LCS-201847** Client ID: Units: **ug/L** Prep Date: **01/16/2015** Run No: **283836**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201847** Analysis Date: **01/16/2015** Seq No: **6016616**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.38	5.0	50.00		94.8	72.8	128				
Toluene	47.64	5.0	50.00		95.3	74.9	127				
Trichloroethene	48.53	5.0	50.00		97.1	70.5	134				
Surr: 4-Bromofluorobenzene	47.65	0	50.00		95.3	70.6	123				
Surr: Dibromofluoromethane	48.24	0	50.00		96.5	78.7	124				
Surr: Toluene-d8	48.14	0	50.00		96.3	81.3	120				

Sample ID: **1501A82-003AMS** Client ID: **MW-507BR-2015115-01** Units: **ug/L** Prep Date: **01/16/2015** Run No: **283839**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201847** Analysis Date: **01/19/2015** Seq No: **6016927**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.11	5.0	50.00		98.2	70	135				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201847

Sample ID: **1501A82-003AMS**	Client ID: **MW-507BR-2015115-01**	Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283839**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201847**	Analysis Date: **01/19/2015**	Seq No: **6016927**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	49.55	5.0	50.00		99.1	70.5	137				
Trichloroethene	51.31	5.0	50.00		103	71.8	139				
Surr: 4-Bromofluorobenzene	47.47	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	50.49	0	50.00		101	78.7	124				
Surr: Toluene-d8	48.70	0	50.00		97.4	81.3	120				

Sample ID: **1501A82-003AMSD**	Client ID: **MW-507BR-2015115-01**	Units: **ug/L**	Prep Date: **01/16/2015**	Run No: **283839**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **201847**	Analysis Date: **01/19/2015**	Seq No: **6016983**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	48.51	5.0	50.00		97.0	70	135	49.11	1.23	20	
Toluene	49.19	5.0	50.00		98.4	70.5	137	49.55	0.729	20	
Trichloroethene	50.32	5.0	50.00		101	71.8	139	51.31	1.95	20	
Surr: 4-Bromofluorobenzene	47.58	0	50.00		95.2	70.6	123	47.47	0	0	
Surr: Dibromofluoromethane	49.20	0	50.00		98.4	78.7	124	50.49	0	0	
Surr: Toluene-d8	47.79	0	50.00		95.6	81.3	120	48.70	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **MB-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284173**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6024719**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.955	0	2.000		97.8	55.4	136				

Sample ID: **LCS-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.907	0.50	2.000		95.3	66.3	118				
Acenaphthylene	1.806	1.0	2.000		90.3	64	120				
Anthracene	2.021	0.050	2.000		101	64.6	127				
Benz(a)anthracene	2.059	0.050	2.000		103	60.6	137				
Benzo(a)pyrene	1.921	0.050	2.000		96.0	64	124				
Benzo(b)fluoranthene	2.333	0.10	2.000		117	56.4	133				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **LCS-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.856	0.10	2.000	0.02318	91.7	49.9	137				
Benzo(k)fluoranthene	1.974	0.050	2.000		98.7	61.7	137				
Chrysene	2.137	0.050	2.000		107	65.5	127				
Dibenz(a,h)anthracene	1.846	0.10	2.000		92.3	52.4	130				
Fluoranthene	2.118	0.10	2.000	0.01725	105	67	131				
Fluorene	1.917	0.10	2.000		95.9	68.3	120				
Indeno(1,2,3-cd)pyrene	2.036	0.050	2.000	0.02805	100	50.4	139				
Naphthalene	1.881	0.50	2.000		94.1	61.1	120				
Phenanthrene	1.867	0.050	2.000	0.01737	92.5	68	119				
Pyrene	1.984	0.050	2.000	0.02895	97.8	62	127				
Surr: 4-Terphenyl-d14	2.071	0	2.000		104	55.4	136				

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.808	0.50	2.000		90.4	45.6	120				
Acenaphthylene	1.730	1.0	2.000		86.5	48.3	124				
Anthracene	1.932	0.050	2.000		96.6	57.7	124				
Benz(a)anthracene	1.982	0.050	2.000		99.1	50.3	143				
Benzo(a)pyrene	1.740	0.050	2.000	0.01651	86.2	44.2	127				
Benzo(b)fluoranthene	1.831	0.10	2.000		91.5	48.4	125				
Benzo(g,h,i)perylene	1.539	0.10	2.000	0.04345	74.8	40.2	122				
Benzo(k)fluoranthene	1.867	0.050	2.000	0.01190	92.7	45.5	122				
Chrysene	2.015	0.050	2.000		101	46	124				
Dibenz(a,h)anthracene	1.481	0.10	2.000	0.03445	72.3	40.1	128				
Fluoranthene	2.037	0.10	2.000		102	58	127				
Fluorene	1.850	0.10	2.000		92.5	52.6	124				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.646	0.050	2.000	0.02057	81.3	40.3	129				
Naphthalene	1.897	0.50	2.000		94.9	46.6	120				
Phenanthrene	1.794	0.050	2.000	0.01564	88.9	50.6	122				
Pyrene	1.913	0.050	2.000		95.7	50.1	128				
Surr: 4-Terphenyl-d14	1.914	0	2.000		95.7	55.4	136				

Sample ID: **1501B49-002AMSD** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023786**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.674	0.50	2.000		83.7	45.6	120	1.808	7.67	29.4	
Acenaphthylene	1.591	1.0	2.000		79.6	48.3	124	1.730	8.37	32.5	
Anthracene	1.887	0.050	2.000		94.3	57.7	124	1.932	2.38	21.9	
Benz(a)anthracene	1.971	0.050	2.000		98.5	50.3	143	1.982	0.565	26.8	
Benzo(a)pyrene	1.664	0.050	2.000	0.01651	82.4	44.2	127	1.740	4.43	40.9	
Benzo(b)fluoranthene	1.742	0.10	2.000		87.1	48.4	125	1.831	4.98	24.2	
Benzo(g,h,i)perylene	1.459	0.10	2.000	0.04345	70.8	40.2	122	1.539	5.34	26.2	
Benzo(k)fluoranthene	1.741	0.050	2.000	0.01190	86.4	45.5	122	1.867	7.00	23.3	
Chrysene	2.060	0.050	2.000		103	46	124	2.015	2.18	25	
Dibenz(a,h)anthracene	1.371	0.10	2.000	0.03445	66.8	40.1	128	1.481	7.73	23.6	
Fluoranthene	2.043	0.10	2.000		102	58	127	2.037	0.287	23.5	
Fluorene	1.734	0.10	2.000		86.7	52.6	124	1.850	6.45	31.5	
Indeno(1,2,3-cd)pyrene	1.513	0.050	2.000	0.02057	74.6	40.3	129	1.646	8.43	28.8	
Naphthalene	1.791	0.50	2.000		89.5	46.6	120	1.897	5.77	22.9	
Phenanthrene	1.799	0.050	2.000	0.01564	89.1	50.6	122	1.794	0.258	20.2	
Pyrene	1.876	0.050	2.000		93.8	50.1	128	1.913	1.98	24.7	
Surr: 4-Terphenyl-d14	1.923	0	2.000		96.2	55.4	136	1.914	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201942

Sample ID: **MB-201942** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MBLK** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-201942** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **LCS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020783**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2659	0.010	0.2500		106	90	110				

Sample ID: **1501A32-010EMS** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2653	0.010	0.2500	0.008100	103	90	110				

Sample ID: **1501A32-020EMS** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020805**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1988	0.010	0.2500	0.01230	74.6	90	110				S

Sample ID: **1501A32-010EMSD** Client ID: Units: **mg/L** Prep Date: **01/20/2015** Run No: **283993**
SampleType: **MSD** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **201942** Analysis Date: **01/20/2015** Seq No: **6020804**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2645	0.010	0.2500	0.008100	103	90	110	0.2653	0.302	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201963

Sample ID: **MB-201963**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023197**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-201963**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023198**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005110	0.00020	0.0050		102	80	120				

Sample ID: **1501A58-006AMS**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023200**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005705	0.00020	0.0050		114	70	130				

Sample ID: **1501A58-006AMSD**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284099**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **201963**		Analysis Date: **01/21/2015**		Seq No: **6023201**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005559	0.00020	0.0050		111	70	130	0.005705	2.59	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201979

Sample ID: **MB-201979** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023957**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-201979** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.052	0.0200	1.000		105	80	120				
Arsenic	1.032	0.0500	1.000		103	80	120				
Barium	1.026	0.0200	1.000		103	80	120				
Beryllium	1.031	0.0100	1.000		103	80	120				
Cadmium	1.022	0.0050	1.000		102	80	120				
Chromium	1.011	0.0100	1.000		101	80	120				
Copper	1.024	0.0100	1.000		102	80	120				
Lead	1.025	0.0100	1.000		102	80	120				
Nickel	1.023	0.0200	1.000		102	80	120				
Selenium	1.013	0.0200	1.000		101	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201979

Sample ID: **LCS-201979** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	1.042	0.0200	1.000		104	80	120				
Vanadium	1.027	0.0100	1.000		103	80	120				
Zinc	1.035	0.0200	1.000		104	80	120				

Sample ID: **1501A41-001DMS** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023967**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.048	0.0200	1.000		105	75	125				
Arsenic	1.042	0.0500	1.000		104	75	125				
Barium	1.017	0.0200	1.000	0.001978	101	75	125				
Beryllium	1.039	0.0100	1.000		104	75	125				
Cadmium	1.028	0.0050	1.000		103	75	125				
Chromium	1.030	0.0100	1.000	0.0003168	103	75	125				
Copper	1.026	0.0100	1.000		103	75	125				
Lead	1.009	0.0100	1.000		101	75	125				
Nickel	1.019	0.0200	1.000		102	75	125				
Selenium	1.015	0.0200	1.000	0.002510	101	75	125				
Thallium	1.033	0.0200	1.000		103	75	125				
Vanadium	1.027	0.0100	1.000		103	75	125				
Zinc	1.046	0.0200	1.000		105	75	125				

Sample ID: **1501A41-001DMSD** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.021	0.0200	1.000		102	75	125	1.048	2.54	20	
Arsenic	1.028	0.0500	1.000		103	75	125	1.042	1.39	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 201979

Sample ID: **1501A41-001DMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C**
Units: **mg/L** Prep Date: **01/21/2015** Run No: **284134**
BatchID: **201979** Analysis Date: **01/21/2015** Seq No: **6023968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	0.9957	0.0200	1.000	0.001978	99.4	75	125	1.017	2.09	20	
Beryllium	1.017	0.0100	1.000		102	75	125	1.039	2.14	20	
Cadmium	1.007	0.0050	1.000		101	75	125	1.028	2.07	20	
Chromium	1.005	0.0100	1.000	0.0003168	100	75	125	1.030	2.50	20	
Copper	1.004	0.0100	1.000		100	75	125	1.026	2.19	20	
Lead	0.9905	0.0100	1.000		99.0	75	125	1.009	1.90	20	
Nickel	0.9972	0.0200	1.000		99.7	75	125	1.019	2.17	20	
Selenium	1.013	0.0200	1.000	0.002510	101	75	125	1.015	0.124	20	
Thallium	1.011	0.0200	1.000		101	75	125	1.033	2.12	20	
Vanadium	1.005	0.0100	1.000		100	75	125	1.027	2.17	20	
Zinc	1.022	0.0200	1.000		102	75	125	1.046	2.36	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: 202007

Sample ID: **MB-202007**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022673**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202007**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022674**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2707	0.010	0.2500		108	90	110				

Sample ID: **1501A82-008EMS**	Client ID: **MW-304-2015115-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022692**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2237	0.010	0.2500	0.009300	85.8	90	110				S

Sample ID: **1501B30-005CMS**	Client ID:				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022694**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2276	0.010	0.2500	0.004800	89.1	90	110				S

Sample ID: **1501A82-008EMSD**	Client ID: **MW-304-2015115-01**				Units: **mg/L**		Prep Date: **01/21/2015**		Run No: **284086**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202007**		Analysis Date: **01/21/2015**		Seq No: **6022693**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2240	0.010	0.2500	0.009300	85.9	90	110	0.2237	0.134	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R283869

Sample ID: **MB-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MBLK**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017335**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **LCS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017336**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4640	0.100	0.5000		92.8	85	115				

Sample ID: **1501A82-001FMS**	Client ID: **MW-509BR-2015115-01**			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017347**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4996	0.100	0.5000	0.08920	82.1	80	120				

Sample ID: **1501A82-001FMSD**	Client ID: **MW-509BR-2015115-01**			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MSD**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017348**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4968	0.100	0.5000	0.08920	81.5	80	120	0.4996	0.562	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **MB-R283956**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019521**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R283956**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019520**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.343	0.25	5.000	0.01013	107	90	110				
Sulfate	26.97	1.0	25.00		108	90	110				

Sample ID: **1501A82-001GMS**	Client ID: **MW-509BR-2015115-01**				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019550**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.028	0.25	5.000		80.6	90	110				S
Sulfate	28.30	1.0	25.00	4.646	94.6	90	110				

Sample ID: **1501B23-001BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019541**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.53	2.5	50.00	10.87	101	90	110				
Sulfate	280.7	10	250.0	24.16	103	90	110				

Sample ID: **1501B23-001BMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **283956**	
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**				BatchID: **R283956**		Analysis Date: **01/16/2015**		Seq No: **6019542**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.62	2.5	50.00	10.87	101	90	110	61.53	0.133	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **1501B23-001BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **283956**
BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	265.2	10	250.0	24.16	96.4	90	110	280.7	5.71	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R284171

Sample ID: **MB-R284171**	Client ID:				Units: **mg/L**			Prep Date:		Run No: **284171**	
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R284171**			Analysis Date: **01/21/2015**		Seq No: **6024649**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501A32-010FDUP**	Client ID:				Units: **mg/L**			Prep Date:		Run No: **284171**	
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R284171**			Analysis Date: **01/21/2015**		Seq No: **6024667**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	3.030	1.00						3.020	0.331	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501A82

ANALYTICAL QC SUMMARY REPORT

BatchID: R284335

Sample ID: **MB-R284335**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028150**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501B40-001GDUP**	Client ID:		Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**		BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	7.710	1.00						7.730	0.259	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 26, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501B40

Analytical Environmental Services, Inc. received 5 samples on 1/16/2015 11:55:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501B40

Date: 01-15-2015 Page 1 of 1

COMPANY: ENVIRONMENTAL RESOURCES MANAGEMENT

ADDRESS: 3200 WINDY HILL RD SE SUITE 1500W ATLANTA, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: C. BROOKS, R. MAYETTE, A. NEAL, A. SHOREDITS, W. VIRGO

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC (8260B)	SVOC (8270B)	TOT METALS + Hg (6010B, 6020B, 7470A)	CYANIDE (9012A)	GASES RSK-175	FERROUS Fe SM3500	SULFATE+NITRATE (300.0)							REMARKS	No # of Containers
	PRESERVATION (See codes)						H	NA	N	NaOH	NA	NA	NA								
1	MW-503BR-20150115-01	01/15/2015	13:25	X		GW	2	2	1	1	2	1	1								10
2	MW-311-20150115-01	-11-	15:01																		10
3	MW-307 BR-20150115-01	-11-	16:40																		10
4	DUP-4-20150115-01	-11-	NA																		10
5	TB-01	NA	NA			W														One cooler.	2
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/16/2015 11:55	1: Latoya Reeves	1/16/15 11:55a
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER GREYHOUND OTHER DROPOFF

PROJECT INFORMATION

PROJECT NAME: ACLC AUGUSTA

PROJECT #: 0230712.52

SITE ADDRESS: 812 8th St AUGUSTA, GA 30901

SEND REPORT TO: greg.sirak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 42

Turnaround Time Request

- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):

E-mail? (Y) N; Fax? Y / N

DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501B40

Case Narrative

Sample containers were not received for MNA analysis for samples "MW-307BR-20150115-01 and DUP-4-20150115-01." Per Andreas Shoredits via phone on 1/16/15 samples for MNA analysis were not collected.

Samples for Dissolved oxygen analysis by Method SM4500-O-G were received and analyzed outside Method specified holding time of “immediate or 15 minutes”.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. F fraction samples were analyzed in the laboratory which is a deviation from the method.

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1501B40-003A, & -004A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-503BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 1:25:00 PM
Lab ID:	1501B40-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	201976	1	01/22/2015 12:41	GK
Benzene	35	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Carbon disulfide	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Ethylbenzene	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Methylene chloride	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Toluene	12	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Trichloroethene	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Xylenes, Total	BRL	5.0		ug/L	201976	1	01/22/2015 12:41	GK
Surr: 4-Bromofluorobenzene	97.7	70.6-123		%REC	201976	1	01/22/2015 12:41	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	201976	1	01/22/2015 12:41	GK
Surr: Toluene-d8	94.9	81.3-120		%REC	201976	1	01/22/2015 12:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	201926	1	01/22/2015 17:33	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/22/2015 17:33	YH
Acenaphthene	BRL	0.50		ug/L	201926	1	01/22/2015 17:33	YH
Fluorene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Phenanthrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Anthracene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 17:33	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 17:33	YH
Surr: 4-Terphenyl-d14	77.1	55.4-136		%REC	201926	1	01/22/2015 17:33	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 14:59	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 18:34	JW
Sulfate	6.7	1.0		mg/L	R283956	1	01/16/2015 18:34	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-503BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 1:25:00 PM
Lab ID:	1501B40-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	8	4		ug/L	201798	1	01/16/2015 16:20	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.500		mg/L	R283869	5	01/16/2015 12:45	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.73	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	BRL	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:07	JL
Barium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:07	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:07	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:07	JL
Zinc	0.0378	0.0200		mg/L	202050	1	01/23/2015 20:07	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-311-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 3:01:00 PM
Lab ID:	1501B40-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	201976	1	01/21/2015 18:40	GK
Benzene	370	50		ug/L	201976	10	01/22/2015 12:11	GK
Carbon disulfide	BRL	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Ethylbenzene	94	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Methylene chloride	BRL	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Toluene	9.6	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Trichloroethene	BRL	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Xylenes, Total	41	5.0		ug/L	201976	1	01/21/2015 18:40	GK
Surr: 4-Bromofluorobenzene	97.8	70.6-123		%REC	201976	10	01/22/2015 12:11	GK
Surr: 4-Bromofluorobenzene	99.8	70.6-123		%REC	201976	1	01/21/2015 18:40	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201976	10	01/22/2015 12:11	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201976	1	01/21/2015 18:40	GK
Surr: Toluene-d8	94.8	81.3-120		%REC	201976	10	01/22/2015 12:11	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201976	1	01/21/2015 18:40	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	560	50		ug/L	201926	100	01/23/2015 10:38	YH
Acenaphthylene	3.2	1.0		ug/L	201926	1	01/22/2015 18:00	YH
Acenaphthene	13	5.0		ug/L	201926	100	01/23/2015 10:38	YH
Fluorene	5.5	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Phenanthrene	3.3	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Anthracene	0.56	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Benz(a)anthracene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Chrysene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:00	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 18:00	YH
Surr: 4-Terphenyl-d14	90.3	55.4-136		%REC	201926	1	01/22/2015 18:00	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 14:48	JG
ION SCAN SW9056A								

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-311-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015 3:01:00 PM
Lab ID:	1501B40-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R283956	1	01/16/2015 18:49	JW
Sulfate	BRL	1.0		mg/L	R283956	1	01/16/2015 18:49	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	410	40		ug/L	201798	10	01/16/2015 16:58	JM
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	4.15	1.00		mg/L	R283869	10	01/16/2015 12:45	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	7.20	1.00	H	mg/L	R284335	1	01/23/2015 10:15	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	329	10.0		mg/L	R283970	1	01/20/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:10	JL
Barium	0.185	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:10	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:10	JL
Zinc	BRL	0.0200		mg/L	202050	1	01/23/2015 20:10	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/16/2015 3:40:00 PM
Lab ID:	1501B40-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	5000		ug/L	201976	100	01/21/2015 17:10	GK
Benzene	12000	500		ug/L	201976	100	01/21/2015 17:10	GK
Carbon disulfide	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Ethylbenzene	2000	500		ug/L	201976	100	01/21/2015 17:10	GK
Methylene chloride	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Toluene	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Trichloroethene	BRL	500		ug/L	201976	100	01/21/2015 17:10	GK
Xylenes, Total	720	500		ug/L	201976	100	01/21/2015 17:10	GK
Surr: 4-Bromofluorobenzene	96.4	70.6-123		%REC	201976	100	01/21/2015 17:10	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	201976	100	01/21/2015 17:10	GK
Surr: Toluene-d8	94.1	81.3-120		%REC	201976	100	01/21/2015 17:10	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	6700	500		ug/L	201926	1000	01/23/2015 11:58	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/22/2015 18:27	YH
Acenaphthene	220	50		ug/L	201926	100	01/23/2015 11:05	YH
Fluorene	48	10		ug/L	201926	100	01/23/2015 11:05	YH
Phenanthrene	46	5.0		ug/L	201926	100	01/23/2015 11:05	YH
Anthracene	7.2	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Fluoranthene	3.5	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Pyrene	4.1	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Benz(a)anthracene	0.20	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Chrysene	0.13	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:27	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 18:27	YH
Surr: 4-Terphenyl-d14	93.5	55.4-136		%REC	201926	1	01/22/2015 18:27	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 15:05	JG
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:14	JL
Barium	0.804	0.0200		mg/L	202050	1	01/23/2015 20:14	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307BR-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/16/2015 3:40:00 PM
Lab ID:	1501B40-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:14	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:14	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:14	JL
Zinc	0.0746	0.0200		mg/L	202050	1	01/23/2015 20:14	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-4-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501B40-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	5000		ug/L	201976	100	01/22/2015 11:41	GK
Benzene	12000	500		ug/L	201976	100	01/22/2015 11:41	GK
Carbon disulfide	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Ethylbenzene	2100	500		ug/L	201976	100	01/22/2015 11:41	GK
Methylene chloride	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Toluene	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Trichloroethene	BRL	500		ug/L	201976	100	01/22/2015 11:41	GK
Xylenes, Total	770	500		ug/L	201976	100	01/22/2015 11:41	GK
Surr: 4-Bromofluorobenzene	97.1	70.6-123		%REC	201976	100	01/22/2015 11:41	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201976	100	01/22/2015 11:41	GK
Surr: Toluene-d8	94.8	81.3-120		%REC	201976	100	01/22/2015 11:41	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202007	1	01/22/2015 10:00	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	8100	500		ug/L	201926	1000	01/23/2015 12:25	YH
Acenaphthylene	BRL	1.0		ug/L	201926	1	01/22/2015 18:54	YH
Acenaphthene	220	50		ug/L	201926	100	01/23/2015 11:32	YH
Fluorene	46	10		ug/L	201926	100	01/23/2015 11:32	YH
Phenanthrene	44	5.0		ug/L	201926	100	01/23/2015 11:32	YH
Anthracene	6.6	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Fluoranthene	3.1	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Pyrene	3.6	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Benz(a)anthracene	0.15	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Chrysene	0.11	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(a)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	201926	1	01/22/2015 18:54	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	201926	1	01/22/2015 18:54	YH
Surr: 4-Terphenyl-d14	94.1	55.4-136		%REC	201926	1	01/22/2015 18:54	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202001	1	01/22/2015 15:07	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Arsenic	BRL	0.0500		mg/L	202050	1	01/23/2015 20:18	JL
Barium	0.826	0.0200		mg/L	202050	1	01/23/2015 20:18	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-4-20150115-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501B40-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Cadmium	BRL	0.0050		mg/L	202050	1	01/23/2015 20:18	JL
Chromium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Copper	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Lead	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Nickel	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Selenium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Thallium	BRL	0.0200		mg/L	202050	1	01/23/2015 20:18	JL
Vanadium	BRL	0.0100		mg/L	202050	1	01/23/2015 20:18	JL
Zinc	0.0802	0.0200		mg/L	202050	1	01/23/2015 20:18	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 28-Jan-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01
Project Name:	AGLC Augusta	**Collection Date:**	1/15/2015
Lab ID:	1501B40-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	201976	1	01/21/2015 18:10	GK
Benzene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Carbon disulfide	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Ethylbenzene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Methylene chloride	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Toluene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Trichloroethene	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Xylenes, Total	BRL	5.0		ug/L	201976	1	01/21/2015 18:10	GK
Surr: 4-Bromofluorobenzene	93.7	70.6-123		%REC	201976	1	01/21/2015 18:10	GK
Surr: Dibromofluoromethane	103	78.7-124		%REC	201976	1	01/21/2015 18:10	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	201976	1	01/21/2015 18:10	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1501B40

Checklist completed by [signature] 1/16/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.4°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes __ No ✓

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by [signature]

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501B40

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501B40-001A	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/22/2015
1501B40-001B	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	GC Analysis of Gaseous Samples		1/16/2015 10:48:55AM	01/16/2015
1501B40-001C	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-001D	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015
1501B40-001D	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-001E	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-001F	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Ferrous Iron			01/16/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Alkalinity			01/20/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	ION SCAN			01/16/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501B40-001G	MW-503BR-20150115-01	1/15/2015 1:25:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501B40-002A	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/21/2015
1501B40-002A	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/22/2015
1501B40-002B	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	GC Analysis of Gaseous Samples		1/16/2015 10:48:55AM	01/16/2015
1501B40-002C	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-002C	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/23/2015
1501B40-002D	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015
1501B40-002D	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-002E	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-002F	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Ferrous Iron			01/16/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Alkalinity			01/20/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	ION SCAN			01/16/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			01/23/2015
1501B40-002G	MW-311-20150115-01	1/15/2015 3:01:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			01/20/2015
1501B40-003A	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/21/2015
1501B40-003B	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-003B	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/23/2015
1501B40-003C	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-003D	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015

Analytical Environmental Services, Inc

Date: 28-Jan-15

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501B40

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501B40-003D	MW-307BR-20150115-01	1/16/2015 3:40:00PM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-004A	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/22/2015
1501B40-004B	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/22/2015
1501B40-004B	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		1/21/2015 2:50:00PM	01/23/2015
1501B40-004C	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	TOTAL METALS BY ICP		1/22/2015 12:45:00PM	01/23/2015
1501B40-004C	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	TOTAL MERCURY		1/22/2015 9:25:00AM	01/22/2015
1501B40-004D	DUP-4-20150115-01	1/15/2015 12:00:00AM	Groundwater	Total Cyanide		1/22/2015 10:00:00AM	01/22/2015
1501B40-005A	TB-01	1/15/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		1/21/2015 8:35:00AM	01/21/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201798

Sample ID: **MB-201798**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019704**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-201798**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019703**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	144.9	4	200.0		72.5	45.1	115				

Sample ID: **LCSD-201798**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019705**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	145.3	4	200.0		72.7	45.1	115	144.9	0.278	20	

Sample ID: **1501A98-003BMS**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019718**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	132.3	4	200.0	11.60	60.4	40.4	115				

Sample ID: **1501A98-003BMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/16/2015**		Run No: **283955**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **201798**		Analysis Date: **01/16/2015**		Seq No: **6019719**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	127.4	4	200.0	11.60	57.9	40.4	115	132.3	3.83	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **MB-201926**	Client ID:		Units: **ug/L**	Prep Date: **01/21/2015**	Run No: **284173**
SampleType: **MBLK**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201926**	Analysis Date: **01/21/2015**	Seq No: **6024719**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.955	0	2.000		97.8	55.4	136				

Sample ID: **LCS-201926**	Client ID:		Units: **ug/L**	Prep Date: **01/21/2015**	Run No: **284122**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**		BatchID: **201926**	Analysis Date: **01/21/2015**	Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.907	0.50	2.000		95.3	66.3	118				
Acenaphthylene	1.806	1.0	2.000		90.3	64	120				
Anthracene	2.021	0.050	2.000		101	64.6	127				
Benz(a)anthracene	2.059	0.050	2.000		103	60.6	137				
Benzo(a)pyrene	1.921	0.050	2.000		96.0	64	124				
Benzo(b)fluoranthene	2.333	0.10	2.000		117	56.4	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **LCS-201926** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.856	0.10	2.000	0.02318	91.7	49.9	137				
Benzo(k)fluoranthene	1.974	0.050	2.000		98.7	61.7	137				
Chrysene	2.137	0.050	2.000		107	65.5	127				
Dibenz(a,h)anthracene	1.846	0.10	2.000		92.3	52.4	130				
Fluoranthene	2.118	0.10	2.000	0.01725	105	67	131				
Fluorene	1.917	0.10	2.000		95.9	68.3	120				
Indeno(1,2,3-cd)pyrene	2.036	0.050	2.000	0.02805	100	50.4	139				
Naphthalene	1.881	0.50	2.000		94.1	61.1	120				
Phenanthrene	1.867	0.050	2.000	0.01737	92.5	68	119				
Pyrene	1.984	0.050	2.000	0.02895	97.8	62	127				
Surr: 4-Terphenyl-d14	2.071	0	2.000		104	55.4	136				

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.808	0.50	2.000		90.4	45.6	120				
Acenaphthylene	1.730	1.0	2.000		86.5	48.3	124				
Anthracene	1.932	0.050	2.000		96.6	57.7	124				
Benz(a)anthracene	1.982	0.050	2.000		99.1	50.3	143				
Benzo(a)pyrene	1.740	0.050	2.000	0.01651	86.2	44.2	127				
Benzo(b)fluoranthene	1.831	0.10	2.000		91.5	48.4	125				
Benzo(g,h,i)perylene	1.539	0.10	2.000	0.04345	74.8	40.2	122				
Benzo(k)fluoranthene	1.867	0.050	2.000	0.01190	92.7	45.5	122				
Chrysene	2.015	0.050	2.000		101	46	124				
Dibenz(a,h)anthracene	1.481	0.10	2.000	0.03445	72.3	40.1	128				
Fluoranthene	2.037	0.10	2.000		102	58	127				
Fluorene	1.850	0.10	2.000		92.5	52.6	124				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201926

Sample ID: **1501B49-002AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.646	0.050	2.000	0.02057	81.3	40.3	129				
Naphthalene	1.897	0.50	2.000		94.9	46.6	120				
Phenanthrene	1.794	0.050	2.000	0.01564	88.9	50.6	122				
Pyrene	1.913	0.050	2.000		95.7	50.1	128				
Surr: 4-Terphenyl-d14	1.914	0	2.000		95.7	55.4	136				

Sample ID: **1501B49-002AMSD** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284122**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **201926** Analysis Date: **01/21/2015** Seq No: **6023786**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.674	0.50	2.000		83.7	45.6	120	1.808	7.67	29.4	
Acenaphthylene	1.591	1.0	2.000		79.6	48.3	124	1.730	8.37	32.5	
Anthracene	1.887	0.050	2.000		94.3	57.7	124	1.932	2.38	21.9	
Benz(a)anthracene	1.971	0.050	2.000		98.5	50.3	143	1.982	0.565	26.8	
Benzo(a)pyrene	1.664	0.050	2.000	0.01651	82.4	44.2	127	1.740	4.43	40.9	
Benzo(b)fluoranthene	1.742	0.10	2.000		87.1	48.4	125	1.831	4.98	24.2	
Benzo(g,h,i)perylene	1.459	0.10	2.000	0.04345	70.8	40.2	122	1.539	5.34	26.2	
Benzo(k)fluoranthene	1.741	0.050	2.000	0.01190	86.4	45.5	122	1.867	7.00	23.3	
Chrysene	2.060	0.050	2.000		103	46	124	2.015	2.18	25	
Dibenz(a,h)anthracene	1.371	0.10	2.000	0.03445	66.8	40.1	128	1.481	7.73	23.6	
Fluoranthene	2.043	0.10	2.000		102	58	127	2.037	0.287	23.5	
Fluorene	1.734	0.10	2.000		86.7	52.6	124	1.850	6.45	31.5	
Indeno(1,2,3-cd)pyrene	1.513	0.050	2.000	0.02057	74.6	40.3	129	1.646	8.43	28.8	
Naphthalene	1.791	0.50	2.000		89.5	46.6	120	1.897	5.77	22.9	
Phenanthrene	1.799	0.050	2.000	0.01564	89.1	50.6	122	1.794	0.258	20.2	
Pyrene	1.876	0.050	2.000		93.8	50.1	128	1.913	1.98	24.7	
Surr: 4-Terphenyl-d14	1.923	0	2.000		96.2	55.4	136	1.914	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201976

Sample ID: **MB-201976** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284016**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201976** Analysis Date: **01/21/2015** Seq No: **6022383**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.29	0	50.00		94.6	70.6	123				
Surr: Dibromofluoromethane	50.66	0	50.00		101	78.7	124				
Surr: Toluene-d8	48.16	0	50.00		96.3	81.3	120				

Sample ID: **LCS-201976** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284016**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201976** Analysis Date: **01/21/2015** Seq No: **6023270**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	48.93	5.0	50.00		97.9	72.8	128				
Toluene	44.93	5.0	50.00		89.9	74.9	127				
Trichloroethene	48.17	5.0	50.00		96.3	70.5	134				
Surr: 4-Bromofluorobenzene	48.06	0	50.00		96.1	70.6	123				
Surr: Dibromofluoromethane	47.93	0	50.00		95.9	78.7	124				
Surr: Toluene-d8	47.83	0	50.00		95.7	81.3	120				

Sample ID: **1501C28-001AMS** Client ID: Units: **ug/L** Prep Date: **01/21/2015** Run No: **284016**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **201976** Analysis Date: **01/21/2015** Seq No: **6022428**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	44.89	5.0	50.00		89.8	70	135				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 201976

Sample ID: **1501C28-001AMS**	Client ID:				Units: **ug/L**		Prep Date: **01/21/2015**		Run No: **284016**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201976**		Analysis Date: **01/21/2015**		Seq No: **6022428**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Toluene	45.96	5.0	50.00		91.9	70.5	137			
Trichloroethene	53.55	5.0	50.00	10.64	85.8	71.8	139			
Surr: 4-Bromofluorobenzene	47.38	0	50.00		94.8	70.6	123			
Surr: Dibromofluoromethane	51.04	0	50.00		102	78.7	124			
Surr: Toluene-d8	47.65	0	50.00		95.3	81.3	120			

Sample ID: **1501C28-001AMSD**	Client ID:				Units: **ug/L**		Prep Date: **01/21/2015**		Run No: **284016**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **201976**		Analysis Date: **01/21/2015**		Seq No: **6022558**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Benzene	44.56	5.0	50.00		89.1	70	135	44.89	0.738	20
Toluene	45.48	5.0	50.00		91.0	70.5	137	45.96	1.05	20
Trichloroethene	51.66	5.0	50.00	10.64	82.0	71.8	139	53.55	3.59	20
Surr: 4-Bromofluorobenzene	46.98	0	50.00		94.0	70.6	123	47.38	0	0
Surr: Dibromofluoromethane	50.75	0	50.00		102	78.7	124	51.04	0	0
Surr: Toluene-d8	48.07	0	50.00		96.1	81.3	120	47.65	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202001

Sample ID: **MB-202001**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025453**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-202001**	Client ID:				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025459**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004909	0.00020	0.0050		98.2	80	120				

Sample ID: **1501B40-002DMS**	Client ID: **MW-311-20150115-01**				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025461**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004029	0.00020	0.0050		80.6	70	130				

Sample ID: **1501B40-002DMSD**	Client ID: **MW-311-20150115-01**				Units: **mg/L**		Prep Date: **01/22/2015**		Run No: **284202**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202001**		Analysis Date: **01/22/2015**		Seq No: **6025462**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004275	0.00020	0.0050		85.5	70	130	0.004029	5.92	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202007

Sample ID: **MB-202007** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MBLK** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022673**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202007** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **LCS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022674**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2707	0.010	0.2500		108	90	110				

Sample ID: **1501A82-008EMS** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022692**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2237	0.010	0.2500	0.009300	85.8	90	110				S

Sample ID: **1501B30-005CMS** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MS** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022694**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2276	0.010	0.2500	0.004800	89.1	90	110				S

Sample ID: **1501A82-008EMSD** Client ID: Units: **mg/L** Prep Date: **01/21/2015** Run No: **284086**
SampleType: **MSD** TestCode: **Total Cyanide (SM4500 CN-C, E)** BatchID: **202007** Analysis Date: **01/21/2015** Seq No: **6022693**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2240	0.010	0.2500	0.009300	85.9	90	110	0.2237	0.134	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202050

Sample ID: **MB-202050** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-202050** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027959**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.009	0.0200	1.000		101	80	120				
Arsenic	0.9989	0.0500	1.000		99.9	80	120				
Barium	0.9977	0.0200	1.000		99.8	80	120				
Beryllium	0.9985	0.0100	1.000		99.8	80	120				
Cadmium	0.9993	0.0050	1.000		99.9	80	120				
Chromium	0.9785	0.0100	1.000	0.0006854	97.8	80	120				
Copper	0.9393	0.0100	1.000		93.9	80	120				
Lead	0.9934	0.0100	1.000		99.3	80	120				
Nickel	1.009	0.0200	1.000	0.0006010	101	80	120				
Selenium	0.9760	0.0200	1.000		97.6	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202050

Sample ID: **LCS-202050** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027959**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	0.9828	0.0200	1.000		98.3	80	120				
Vanadium	0.9823	0.0100	1.000		98.2	80	120				
Zinc	1.008	0.0200	1.000	0.005860	100	80	120				

Sample ID: **1501A97-001BMS** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027961**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.018	0.0200	1.000		102	75	125				
Arsenic	1.006	0.0500	1.000		101	75	125				
Barium	1.026	0.0200	1.000	0.03357	99.3	75	125				
Beryllium	1.008	0.0100	1.000		101	75	125				
Cadmium	1.004	0.0050	1.000		100	75	125				
Chromium	0.9831	0.0100	1.000	0.003652	97.9	75	125				
Copper	0.9519	0.0100	1.000		95.2	75	125				
Lead	0.9945	0.0100	1.000		99.4	75	125				
Nickel	1.011	0.0200	1.000		101	75	125				
Selenium	0.9878	0.0200	1.000		98.8	75	125				
Thallium	0.9824	0.0200	1.000		98.2	75	125				
Vanadium	0.9896	0.0100	1.000		99.0	75	125				
Zinc	1.018	0.0200	1.000	0.005782	101	75	125				

Sample ID: **1501A97-001BMSD** Client ID: Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027962**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.027	0.0200	1.000		103	75	125	1.018	0.907	20	
Arsenic	1.022	0.0500	1.000		102	75	125	1.006	1.53	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: 202050

Sample ID: **1501A97-001BMSD** Client ID:
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C**
Units: **mg/L** Prep Date: **01/22/2015** Run No: **284328**
BatchID: **202050** Analysis Date: **01/23/2015** Seq No: **6027962**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	1.026	0.0200	1.000	0.03357	99.3	75	125	1.026	0.002	20	
Beryllium	1.020	0.0100	1.000		102	75	125	1.008	1.14	20	
Cadmium	1.015	0.0050	1.000		102	75	125	1.004	1.15	20	
Chromium	0.9926	0.0100	1.000	0.003652	98.9	75	125	0.9831	0.965	20	
Copper	0.9586	0.0100	1.000		95.9	75	125	0.9519	0.705	20	
Lead	1.004	0.0100	1.000		100	75	125	0.9945	0.925	20	
Nickel	1.020	0.0200	1.000		102	75	125	1.011	0.963	20	
Selenium	1.009	0.0200	1.000		101	75	125	0.9878	2.12	20	
Thallium	0.9961	0.0200	1.000		99.6	75	125	0.9824	1.39	20	
Vanadium	0.9993	0.0100	1.000		99.9	75	125	0.9896	0.977	20	
Zinc	1.029	0.0200	1.000	0.005782	102	75	125	1.018	1.08	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R283869

Sample ID: **MB-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MBLK**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017335**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R283869**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **LCS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017336**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4640	0.100	0.5000		92.8	85	115				

Sample ID: **1501A82-001FMS**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017347**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4996	0.100	0.5000	0.08920	82.1	80	120				

Sample ID: **1501A82-001FMSD**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **283869**
SampleType: **MSD**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R283869**	Analysis Date: **01/16/2015**	Seq No: **6017348**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4968	0.100	0.5000	0.08920	81.5	80	120	0.4996	0.562	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **MB-R283956** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019521**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R283956** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019520**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.343	0.25	5.000	0.01013	107	90	110				
Sulfate	26.97	1.0	25.00		108	90	110				

Sample ID: **1501A82-001GMS** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019550**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.028	0.25	5.000		80.6	90	110				S
Sulfate	28.30	1.0	25.00	4.646	94.6	90	110				

Sample ID: **1501B23-001BMS** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019541**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.53	2.5	50.00	10.87	101	90	110				
Sulfate	280.7	10	250.0	24.16	103	90	110				

Sample ID: **1501B23-001BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **283956**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	61.62	2.5	50.00	10.87	101	90	110	61.53	0.133	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R283956

Sample ID: **1501B23-001BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **283956**
BatchID: **R283956** Analysis Date: **01/16/2015** Seq No: **6019542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	265.2	10	250.0	24.16	96.4	90	110	280.7	5.71	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501B40

ANALYTICAL QC SUMMARY REPORT

BatchID: R284335

Sample ID: **MB-R284335**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028150**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501B40-001GDUP**	Client ID: **MW-503BR-20150115-01**			Units: **mg/L**	Prep Date:	Run No: **284335**
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**			BatchID: **R284335**	Analysis Date: **01/23/2015**	Seq No: **6028158**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	7.710	1.00						7.730	0.259	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 18, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta

Dear Greg Jirak: Order No: 1501N94

Analytical Environmental Services, Inc. received 8 samples on 1/30/2015 11:02:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1501N94

Date: 1/29/15 Page 1 of 1

COMPANY:	ADDRESS:
ERM	3200 Windy Hill Rd SE Ste 1500w Atlanta, GA 30339
PHONE: 678-230-7604	FAX:
SAMPLED BY: B. Mitchell / Barrett Escher / Don Dowling	SIGNATURE: Donald Dowling

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) H+	NaOH	I	I	I	ANALYSIS REQUESTED 8260B	8270C (PAH)	6010B - Mod metals + mercury	9012A - cyanide	Fe 2+	O_2, CO_2	Sulfate/Nitrate	REMARKS	No # of Containers
1	TB-01-20150129-01	1-29-15	—	X		W	X													2
2	~~DUP~~ DUP-05-20150129-01		1600			GW		X	X	X										6
3	DUP-06-20150129-01		1600									X	X	X					MNA included	6
4	MW-308BR-20150129-01		1030																	6
5	MW-307D-20150129-01		1257																	6
6	MW-207-20150129-01		1425																	6
7	MW-207MS-20150129-01		1425																	6
8	MW-207MSD-20150129-01		1425																	6
9	MW-401SAP-20150129-01		1530									X	X	X						10
10	MW-401SAPMS-20150129-01		1530																	10
11	MW-401SAPMSD-20150129-01		1530																	10
12	MW-309BR-20150129-01		1640																	10
13	MW-309BRMS-20150129-01		1640																	10
14	MW-309BRMSD-20150129-01	↓	1640	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓		10

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Bill Mitchell	01-30-15 11:02	1: Cataya Reeves	1/30/15 11:02a
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:
Fe2+ shorthold

SHIPMENT METHOD
OUT / /
IN / /
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: AGLC Augusta
PROJECT #: 0230712 ph052
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg Jirak
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 104

Turnaround Time Request
- ✓ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta
Lab ID: 1501N94

Case Narrative

Sample Receiving Nonconformance:

Samples for Dissolved Oxygen analysis by Method SM4500-O-G were received and analyzed outside of the method specified holding time of “immediate or 15 minutes”.

Methane analysis was not listed on the COC but was reported per project requirements for samples 1501N94-003, -007, and -008.

Volatile Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1501N94-002A and -004A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Ferrous Iron by SM3500Fe-B:

Method 3500Fe-B as listed in Standard Methods for the Examination of Water and Wastewater 22nd Edition is applicable for analyzing Ferrous Iron in the field. Samples requiring Ferrous Iron were analyzed in the laboratory which is a deviation from the method.

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015
Lab ID:	1501N94-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Acetone	BRL	50		ug/L	202589	1	02/03/2015 15:51	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 15:51	GK
Surr: 4-Bromofluorobenzene	107	70.6-123		%REC	202589	1	02/03/2015 15:51	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	202589	1	02/03/2015 15:51	GK
Surr: Toluene-d8	97.9	81.3-120		%REC	202589	1	02/03/2015 15:51	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-05-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	2500		ug/L	202589	50	02/03/2015 16:21	GK
Benzene	6100	250		ug/L	202589	50	02/03/2015 16:21	GK
Carbon disulfide	BRL	250		ug/L	202589	50	02/03/2015 16:21	GK
Ethylbenzene	720	250		ug/L	202589	50	02/03/2015 16:21	GK
Methylene chloride	BRL	250		ug/L	202589	50	02/03/2015 16:21	GK
Toluene	1900	250		ug/L	202589	50	02/03/2015 16:21	GK
Trichloroethene	BRL	250		ug/L	202589	50	02/03/2015 16:21	GK
Xylenes, Total	740	250		ug/L	202589	50	02/03/2015 16:21	GK
Surr: 4-Bromofluorobenzene	96.8	70.6-123		%REC	202589	50	02/03/2015 16:21	GK
Surr: Dibromofluoromethane	98.6	78.7-124		%REC	202589	50	02/03/2015 16:21	GK
Surr: Toluene-d8	96.4	81.3-120		%REC	202589	50	02/03/2015 16:21	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	3200	500		ug/L	202663	1000	02/05/2015 18:05	YH
Acenaphthylene	63	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Acenaphthene	46	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Fluorene	21	10		ug/L	202663	100	02/06/2015 10:22	YH
Phenanthrene	29	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Anthracene	7.5	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Fluoranthene	12	10		ug/L	202663	100	02/06/2015 10:22	YH
Pyrene	19	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Benz(a)anthracene	9.9	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Chrysene	8.3	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Benzo(b)fluoranthene	10	10		ug/L	202663	100	02/06/2015 10:22	YH
Benzo(k)fluoranthene	3.2	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Benzo(a)pyrene	11	5.0		ug/L	202663	100	02/06/2015 10:22	YH
Indeno(1,2,3-cd)pyrene	4.9	0.050		ug/L	202663	1	02/05/2015 16:02	YH
Dibenz(a,h)anthracene	1.2	0.10		ug/L	202663	1	02/05/2015 16:02	YH
Benzo(g,h,i)perylene	6.2	0.10		ug/L	202663	1	02/05/2015 16:02	YH
Surr: 4-Terphenyl-d14	77.7	55.4-136		%REC	202663	1	02/05/2015 16:02	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 10:15	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:02	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:02	JL
Barium	1.15	0.0200		mg/L	202561	1	02/04/2015 23:02	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-05-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:02	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:02	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:11	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:02	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:02	JL
Zinc	0.0508	0.0200		mg/L	202561	1	02/04/2015 23:02	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-06-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 17:21	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Trichloroethene	20	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 17:21	GK
Surr: 4-Bromofluorobenzene	90.8	70.6-123		%REC	202589	1	02/03/2015 17:21	GK
Surr: Dibromofluoromethane	99.3	78.7-124		%REC	202589	1	02/03/2015 17:21	GK
Surr: Toluene-d8	103	81.3-120		%REC	202589	1	02/03/2015 17:21	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 16:28	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 16:28	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 16:28	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:28	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 16:28	YH
Surr: 4-Terphenyl-d14	81.8	55.4-136		%REC	202663	1	02/05/2015 16:28	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	0.00034	0.00020		mg/L	203295	1	02/17/2015 16:49	JG
ION SCAN SW9056A								
Nitrate	2.4	0.25		mg/L	R285097	1	01/30/2015 14:38	JW
Sulfate	41	1.0		mg/L	R285097	1	01/30/2015 14:38	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	DUP-06-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:00:00 PM
Lab ID:	1501N94-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	202520	1	02/03/2015 10:41	SH
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R284868	1	01/30/2015 14:25	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.45	1.00	H	mg/L	R285387	1	02/09/2015 12:00	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	60.4	10.0		mg/L	R285013	1	02/03/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:06	JL
Barium	0.0566	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:06	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:14	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:06	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 23:06	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-308BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 10:30:00 AM
Lab ID:	1501N94-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	2500		ug/L	202589	50	02/03/2015 16:51	GK
Benzene	6600	250		ug/L	202589	50	02/03/2015 16:51	GK
Carbon disulfide	BRL	250		ug/L	202589	50	02/03/2015 16:51	GK
Ethylbenzene	810	250		ug/L	202589	50	02/03/2015 16:51	GK
Methylene chloride	BRL	250		ug/L	202589	50	02/03/2015 16:51	GK
Toluene	2100	250		ug/L	202589	50	02/03/2015 16:51	GK
Trichloroethene	BRL	250		ug/L	202589	50	02/03/2015 16:51	GK
Xylenes, Total	880	250		ug/L	202589	50	02/03/2015 16:51	GK
Surr: 4-Bromofluorobenzene	97.4	70.6-123		%REC	202589	50	02/03/2015 16:51	GK
Surr: Dibromofluoromethane	99.8	78.7-124		%REC	202589	50	02/03/2015 16:51	GK
Surr: Toluene-d8	96.1	81.3-120		%REC	202589	50	02/03/2015 16:51	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	3400	500		ug/L	202663	1000	02/05/2015 18:30	YH
Acenaphthylene	66	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Acenaphthene	46	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Fluorene	22	10		ug/L	202663	100	02/06/2015 10:49	YH
Phenanthrene	28	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Anthracene	7.0	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Fluoranthene	12	10		ug/L	202663	100	02/06/2015 10:49	YH
Pyrene	17	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Benz(a)anthracene	9.6	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Chrysene	7.8	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(b)fluoranthene	10.0	0.10		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(k)fluoranthene	3.3	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(a)pyrene	11	5.0		ug/L	202663	100	02/06/2015 10:49	YH
Indeno(1,2,3-cd)pyrene	4.8	0.050		ug/L	202663	1	02/05/2015 17:21	YH
Dibenz(a,h)anthracene	1.1	0.10		ug/L	202663	1	02/05/2015 17:21	YH
Benzo(g,h,i)perylene	5.9	0.10		ug/L	202663	1	02/05/2015 17:21	YH
Surr: 4-Terphenyl-d14	79.5	55.4-136		%REC	202663	1	02/05/2015 17:21	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 10:19	JG
METALS, TOTAL SW6010C				(SW3010A)				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:09	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:09	JL
Barium	1.11	0.0200		mg/L	202561	1	02/04/2015 23:09	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-308BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 10:30:00 AM
Lab ID:	1501N94-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:09	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:09	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:18	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:09	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:09	JL
Zinc	0.0472	0.0200		mg/L	202561	1	02/04/2015 23:09	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 12:57:00 PM
Lab ID:	1501N94-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 17:51	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 17:51	GK
Surr: 4-Bromofluorobenzene	93.7	70.6-123		%REC	202589	1	02/03/2015 17:51	GK
Surr: Dibromofluoromethane	99	78.7-124		%REC	202589	1	02/03/2015 17:51	GK
Surr: Toluene-d8	97.4	81.3-120		%REC	202589	1	02/03/2015 17:51	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 16:55	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 16:55	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 16:55	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Pyrene	0.079	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 16:55	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 16:55	YH
Surr: 4-Terphenyl-d14	81.8	55.4-136		%REC	202663	1	02/05/2015 16:55	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 10:21	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 23:20	JL
Barium	0.0712	0.0200		mg/L	202561	1	02/04/2015 23:20	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-307D-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 12:57:00 PM
Lab ID:	1501N94-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 23:20	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:22	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 23:20	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 23:20	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 2:25:00 PM
Lab ID:	1501N94-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 15:21	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 15:21	GK
Surr: 4-Bromofluorobenzene	96.2	70.6-123		%REC	202589	1	02/03/2015 15:21	GK
Surr: Dibromofluoromethane	104	78.7-124		%REC	202589	1	02/03/2015 15:21	GK
Surr: Toluene-d8	95.1	81.3-120		%REC	202589	1	02/03/2015 15:21	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 17:48	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 17:48	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 17:48	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Anthracene	0.051	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 17:48	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 17:48	YH
Surr: 4-Terphenyl-d14	74.8	55.4-136		%REC	202663	1	02/05/2015 17:48	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 09:34	JG
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 13:55	JL
Barium	0.323	0.0200		mg/L	202561	1	02/04/2015 13:55	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-207-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 2:25:00 PM
Lab ID:	1501N94-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 13:55	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Selenium	0.0687	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 13:55	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 13:55	JL

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 3:30:00 PM
Lab ID:	1501N94-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 18:21	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Trichloroethene	19	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 18:21	GK
Surr: 4-Bromofluorobenzene	94.1	70.6-123		%REC	202589	1	02/03/2015 18:21	GK
Surr: Dibromofluoromethane	99.5	78.7-124		%REC	202589	1	02/03/2015 18:21	GK
Surr: Toluene-d8	96.5	81.3-120		%REC	202589	1	02/03/2015 18:21	GK
Total Cyanide (SM4500 CN-C, E)				(SM4500-CN-E)				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				(SW3510C)				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 18:13	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 18:13	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 18:13	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:13	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 18:13	YH
Surr: 4-Terphenyl-d14	79.8	55.4-136		%REC	202663	1	02/05/2015 18:13	YH
Mercury, Total SW7470A				(SW7470A)				
Mercury	0.00036	0.00020		mg/L	203295	1	02/17/2015 16:41	JG
ION SCAN SW9056A								
Nitrate	2.6	0.25		mg/L	R285097	1	01/30/2015 14:53	JW
Sulfate	43	1.0		mg/L	R285097	1	01/30/2015 14:53	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-401SAP-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 3:30:00 PM
Lab ID:	1501N94-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	BRL	4		ug/L	202519	1	02/02/2015 18:44	SH
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R284868	1	01/30/2015 14:25	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.44	1.00	H	mg/L	R285387	1	02/09/2015 12:00	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	65.5	10.0		mg/L	R285013	1	02/03/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 21:51	JL
Barium	0.0576	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 21:51	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Copper	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:25	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 21:51	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 21:51	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:40:00 PM
Lab ID:	1501N94-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Acetone	BRL	50		ug/L	202589	1	02/03/2015 18:51	GK
Benzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Carbon disulfide	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Ethylbenzene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Methylene chloride	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Toluene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Trichloroethene	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Xylenes, Total	BRL	5.0		ug/L	202589	1	02/03/2015 18:51	GK
Surr: 4-Bromofluorobenzene	85.8	70.6-123		%REC	202589	1	02/03/2015 18:51	GK
Surr: Dibromofluoromethane	102	78.7-124		%REC	202589	1	02/03/2015 18:51	GK
Surr: Toluene-d8	120	81.3-120		%REC	202589	1	02/03/2015 18:51	GK
Total Cyanide (SM4500 CN-C, E)				**(SM4500-CN-E)**				
Cyanide, Total	BRL	0.010		mg/L	202688	1	02/04/2015 12:25	PF
SIM Polynuclear Aromatic Hydrocarbons SW8270D				**(SW3510C)**				
Naphthalene	BRL	0.50		ug/L	202663	1	02/05/2015 18:40	YH
Acenaphthylene	BRL	1.0		ug/L	202663	1	02/05/2015 18:40	YH
Acenaphthene	BRL	0.50		ug/L	202663	1	02/05/2015 18:40	YH
Fluorene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Phenanthrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Benz(a)anthracene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Chrysene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(b)fluoranthene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(k)fluoranthene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(a)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Indeno(1,2,3-cd)pyrene	BRL	0.050		ug/L	202663	1	02/05/2015 18:40	YH
Dibenz(a,h)anthracene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Benzo(g,h,i)perylene	BRL	0.10		ug/L	202663	1	02/05/2015 18:40	YH
Surr: 4-Terphenyl-d14	74.2	55.4-136		%REC	202663	1	02/05/2015 18:40	YH
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	202639	1	02/05/2015 09:52	JG
ION SCAN SW9056A								
Nitrate	BRL	0.25		mg/L	R285097	1	01/30/2015 15:08	JW
Sulfate	BRL	1.0		mg/L	R285097	1	01/30/2015 15:08	JW

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	MW-309BR-20150129-01
Project Name:	AGLC Augusta	**Collection Date:**	1/29/2015 4:40:00 PM
Lab ID:	1501N94-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Methane	120	4		ug/L	202520	1	02/03/2015 10:47	SH
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	0.119	0.100		mg/L	R284868	1	01/30/2015 14:25	AB
Dissolved Oxygen by SM4500-O-G								
Oxygen, Dissolved	8.46	1.00	H	mg/L	R285387	1	02/09/2015 12:00	CH
CARBON DIOXIDE SM4500-CO2								
Total Carbon Dioxide	47.3	10.0		mg/L	R285013	1	02/03/2015 00:00	TL
METALS, TOTAL SW6010C				**(SW3010A)**				
Antimony	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Arsenic	BRL	0.0500		mg/L	202561	1	02/04/2015 22:10	JL
Barium	0.143	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Beryllium	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Cadmium	BRL	0.0050		mg/L	202561	1	02/04/2015 22:10	JL
Chromium	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Copper	0.0348	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Lead	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Nickel	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Selenium	BRL	0.0200		mg/L	202561	1	02/05/2015 22:28	JL
Thallium	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL
Vanadium	BRL	0.0100		mg/L	202561	1	02/04/2015 22:10	JL
Zinc	BRL	0.0200		mg/L	202561	1	02/04/2015 22:10	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EAM Work Order Number 1501N94

Checklist completed by [signature] 11/30/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.1° Cooler #2 3.9° Cooler #3 3.8 Cooler #4 3.6' Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by MS

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 18-Feb-15

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501N94

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501N94-001A	TB-01-20150129-01	1/29/2015 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-002A	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-002B	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-002B	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/06/2015
1501N94-002C	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-002C	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-002C	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-002D	DUP-05-20150129-01	1/29/2015 4:00:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-003A	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-003B	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	GC Analysis of Gaseous Samples		2/3/2015 10:07:24AM	02/03/2015
1501N94-003C	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-003D	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-003D	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-003D	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	TOTAL MERCURY		2/17/2015 2:00:00PM	02/17/2015
1501N94-003E	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-003F	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Ferrous Iron			01/30/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Alkalinity			02/03/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	ION SCAN			01/30/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			02/09/2015
1501N94-003G	DUP-06-20150129-01	1/29/2015 4:00:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			02/03/2015
1501N94-004A	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-004B	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-004B	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/06/2015
1501N94-004C	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-004C	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-004C	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-004D	MW-308BR-20150129-01	1/29/2015 10:30:00AM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-005A	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-005B	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501N94

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501N94-005C	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-005C	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-005C	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-005D	MW-307D-20150129-01	1/29/2015 12:57:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-006A	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-006B	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-006C	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-006C	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-006D	MW-207-20150129-01	1/29/2015 2:25:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-007A	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-007B	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	GC Analysis of Gaseous Samples		2/2/2015 10:05:25AM	02/02/2015
1501N94-007C	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-007D	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-007D	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-007D	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	TOTAL MERCURY		2/17/2015 2:00:00PM	02/17/2015
1501N94-007E	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-007F	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Ferrous Iron			01/30/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Alkalinity			02/03/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	ION SCAN			01/30/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			02/09/2015
1501N94-007G	MW-401SAP-20150129-01	1/29/2015 3:30:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			02/03/2015
1501N94-008A	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		2/3/2015 9:16:33AM	02/03/2015
1501N94-008B	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	GC Analysis of Gaseous Samples		2/3/2015 10:07:24AM	02/03/2015
1501N94-008C	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Polynuclear Aromatic Hydrocarbons		2/5/2015 9:00:00AM	02/05/2015
1501N94-008D	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/04/2015
1501N94-008D	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	TOTAL METALS BY ICP		2/3/2015 12:15:00PM	02/05/2015
1501N94-008D	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	TOTAL MERCURY		2/4/2015 10:00:00AM	02/05/2015
1501N94-008E	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Total Cyanide		2/4/2015 10:00:00AM	02/04/2015
1501N94-008F	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Ferrous Iron			01/30/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Lab Order: 1501N94

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Alkalinity			02/03/2015
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	ION SCAN			01/30/2015
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Dissolved Oxygen by SM4500-O-G			02/09/2015
1501N94-008G	MW-309BR-20150129-01	1/29/2015 4:40:00PM	Groundwater	Carbon Dioxide and Forms of Alkalinity			02/03/2015

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202519

Sample ID: **MB-202519**	Client ID:				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6042716**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-202519**	Client ID:				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6042717**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	121.9	4	200.0		61.0	45.1	115				

Sample ID: **LCSD-202519**	Client ID:				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6042718**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	113.6	4	200.0		56.8	45.1	115	121.9	7.10	20	

Sample ID: **1501N94-007BMS**	Client ID: **MW-401SAP-20150129-01**				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6044465**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	108.0	4	200.0		54.0	40.4	115				

Sample ID: **1501N94-007BMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **ug/L**		Prep Date: **02/02/2015**		Run No: **284934**
SampleType: **MSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202519**		Analysis Date: **02/02/2015**		Seq No: **6044467**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	103.4	4	200.0		51.7	40.4	115	108.0	4.38	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202520

Sample ID: **MB-202520**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **MBLK**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044476**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	BRL	4									

Sample ID: **LCS-202520**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **LCS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044477**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	113.8	4	200.0		56.9	45.1	115				

Sample ID: **LCSD-202520**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **LCSD**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044478**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	112.2	4	200.0		56.1	45.1	115	113.8	1.43	20	

Sample ID: **1501N94-008BMS**	Client ID: **MW-309BR-20150129-01**				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044481**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	431.2	4	200.0	270.6	80.3	40.4	115				

Sample ID: **1502030-004AMS**	Client ID:				Units: **ug/L**		Prep Date: **02/03/2015**		Run No: **285001**
SampleType: **MS**	TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**				BatchID: **202520**		Analysis Date: **02/03/2015**		Seq No: **6044489**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	230.5	4	200.0	115.1	57.7	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202520

Sample ID: **1501N94-008BMSD** Client ID: **MW-309BR-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **285001**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **202520** Analysis Date: **02/03/2015** Seq No: **6044482**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	416.3	4	200.0	270.6	72.8	40.4	115	431.2	3.52	20	

Sample ID: **1502030-004AMSD** Client ID: Units: **ug/L** Prep Date: **02/03/2015** Run No: **285001**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **202520** Analysis Date: **02/03/2015** Seq No: **6044490**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methane	236.4	4	200.0	115.1	60.6	40.4	115	230.5	2.54	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **MB-202561** Client ID: Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048340**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Chromium	BRL	0.0100									
Copper	BRL	0.0100									
Lead	BRL	0.0100									
Nickel	BRL	0.0200									
Selenium	BRL	0.0200									
Thallium	BRL	0.0200									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Sample ID: **LCS-202561** Client ID: Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **LCS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048341**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.007	0.0200	1.000		101	80	120				
Arsenic	0.9921	0.0500	1.000		99.2	80	120				
Barium	1.005	0.0200	1.000		100	80	120				
Beryllium	1.011	0.0100	1.000		101	80	120				
Cadmium	1.011	0.0050	1.000		101	80	120				
Chromium	1.006	0.0100	1.000		101	80	120				
Copper	1.020	0.0100	1.000		102	80	120				
Lead	1.005	0.0100	1.000		101	80	120				
Nickel	1.007	0.0200	1.000		101	80	120				
Selenium	0.9252	0.0200	1.000	0.005792	91.9	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **LCS-202561** Client ID: Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048341**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	0.9981	0.0200	1.000		99.8	80	120				
Vanadium	1.011	0.0100	1.000		101	80	120				
Zinc	1.013	0.0200	1.000	0.007427	101	80	120				

Sample ID: **1501N94-006CMS** Client ID: **MW-207-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048343**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9752	0.0200	1.000		97.5	75	125				
Arsenic	0.9664	0.0500	1.000	0.01718	94.9	75	125				
Barium	1.282	0.0200	1.000	0.3231	95.9	75	125				
Beryllium	0.9733	0.0100	1.000		97.3	75	125				
Cadmium	0.9800	0.0050	1.000		98.0	75	125				
Chromium	0.9832	0.0100	1.000	0.001571	98.2	75	125				
Copper	0.9939	0.0100	1.000		99.4	75	125				
Lead	0.9564	0.0100	1.000		95.6	75	125				
Nickel	0.9518	0.0200	1.000	0.002675	94.9	75	125				
Selenium	0.9133	0.0200	1.000	0.06867	84.5	75	125				
Thallium	0.9531	0.0200	1.000		95.3	75	125				
Vanadium	0.9839	0.0100	1.000	0.002868	98.1	75	125				
Zinc	0.9830	0.0200	1.000	0.01811	96.5	75	125				

Sample ID: **1501N94-007DMS** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049403**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9860	0.0200	1.000		98.6	75	125				
Arsenic	0.9628	0.0500	1.000		96.3	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **1501N94-007DMS** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049403**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	1.030	0.0200	1.000	0.05764	97.3	75	125				
Beryllium	0.9820	0.0100	1.000		98.2	75	125				
Cadmium	0.9861	0.0050	1.000		98.6	75	125				
Chromium	0.9834	0.0100	1.000	0.001381	98.2	75	125				
Copper	1.001	0.0100	1.000		100	75	125				
Lead	0.9711	0.0100	1.000		97.1	75	125				
Nickel	0.9535	0.0200	1.000		95.3	75	125				
Selenium	0.8881	0.0200	1.000	0.01321	87.5	75	125				
Thallium	0.9766	0.0200	1.000		97.7	75	125				
Vanadium	0.9931	0.0100	1.000		99.3	75	125				
Zinc	0.9749	0.0200	1.000	0.01230	96.3	75	125				

Sample ID: **1501N94-008DMS** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049408**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.010	0.0200	1.000		101	75	125				
Arsenic	0.9814	0.0500	1.000	0.01593	96.6	75	125				
Barium	1.142	0.0200	1.000	0.1429	99.9	75	125				
Beryllium	0.9961	0.0100	1.000		99.6	75	125				
Cadmium	1.003	0.0050	1.000	0.003844	99.9	75	125				
Chromium	1.011	0.0100	1.000	0.001575	101	75	125				
Copper	1.033	0.0100	1.000	0.03484	99.8	75	125				
Lead	0.9954	0.0100	1.000		99.5	75	125				
Nickel	0.9840	0.0200	1.000		98.4	75	125				
Selenium	0.9478	0.0200	1.000	0.07263	87.5	75	125				
Thallium	1.002	0.0200	1.000		100	75	125				
Vanadium	1.013	0.0100	1.000	0.0007756	101	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **1501N94-008DMS** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049408**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	0.9925	0.0200	1.000	0.01295	98.0	75	125				

Sample ID: **1501N94-006CMSD** Client ID: **MW-207-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6048344**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9813	0.0200	1.000		98.1	75	125	0.9752	0.626	20	
Arsenic	0.9879	0.0500	1.000	0.01718	97.1	75	125	0.9664	2.20	20	
Barium	1.295	0.0200	1.000	0.3231	97.1	75	125	1.282	0.998	20	
Beryllium	0.9817	0.0100	1.000		98.2	75	125	0.9733	0.859	20	
Cadmium	0.9888	0.0050	1.000		98.9	75	125	0.9800	0.897	20	
Chromium	0.9899	0.0100	1.000	0.001571	98.8	75	125	0.9832	0.671	20	
Copper	1.003	0.0100	1.000		100	75	125	0.9939	0.881	20	
Lead	0.9634	0.0100	1.000		96.3	75	125	0.9564	0.732	20	
Nickel	0.9588	0.0200	1.000	0.002675	95.6	75	125	0.9518	0.733	20	
Selenium	0.9998	0.0200	1.000	0.06867	93.1	75	125	0.9133	9.04	20	
Thallium	0.9554	0.0200	1.000		95.5	75	125	0.9531	0.243	20	
Vanadium	0.9903	0.0100	1.000	0.002868	98.7	75	125	0.9839	0.645	20	
Zinc	0.9894	0.0200	1.000	0.01811	97.1	75	125	0.9830	0.644	20	

Sample ID: **1501N94-007DMSD** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049404**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9793	0.0200	1.000		97.9	75	125	0.9860	0.673	20	
Arsenic	0.9723	0.0500	1.000		97.2	75	125	0.9628	0.978	20	
Barium	1.023	0.0200	1.000	0.05764	96.5	75	125	1.030	0.725	20	
Beryllium	0.9759	0.0100	1.000		97.6	75	125	0.9820	0.618	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202561

Sample ID: **1501N94-007DMSD** Client ID: **MW-401SAP-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049404**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cadmium	0.9812	0.0050	1.000		98.1	75	125	0.9861	0.501	20	
Chromium	0.9764	0.0100	1.000	0.001381	97.5	75	125	0.9834	0.711	20	
Copper	0.9945	0.0100	1.000		99.4	75	125	1.001	0.659	20	
Lead	0.9658	0.0100	1.000		96.6	75	125	0.9711	0.548	20	
Nickel	0.9466	0.0200	1.000		94.7	75	125	0.9535	0.717	20	
Selenium	1.008	0.0200	1.000	0.01321	99.5	75	125	0.8881	12.7	20	
Thallium	0.9726	0.0200	1.000		97.3	75	125	0.9766	0.411	20	
Vanadium	0.9871	0.0100	1.000		98.7	75	125	0.9931	0.603	20	
Zinc	0.9726	0.0200	1.000	0.01230	96.0	75	125	0.9749	0.233	20	

Sample ID: **1501N94-008DMSD** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: **02/03/2015** Run No: **285155**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **202561** Analysis Date: **02/04/2015** Seq No: **6049409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9933	0.0200	1.000		99.3	75	125	1.010	1.62	20	
Arsenic	0.9807	0.0500	1.000	0.01593	96.5	75	125	0.9814	0.076	20	
Barium	1.125	0.0200	1.000	0.1429	98.2	75	125	1.142	1.48	20	
Beryllium	0.9803	0.0100	1.000		98.0	75	125	0.9961	1.60	20	
Cadmium	0.9883	0.0050	1.000	0.003844	98.4	75	125	1.003	1.43	20	
Chromium	0.9957	0.0100	1.000	0.001575	99.4	75	125	1.011	1.56	20	
Copper	1.017	0.0100	1.000	0.03484	98.3	75	125	1.033	1.50	20	
Lead	0.9763	0.0100	1.000		97.6	75	125	0.9954	1.94	20	
Nickel	0.9717	0.0200	1.000		97.2	75	125	0.9840	1.26	20	
Selenium	1.029	0.0200	1.000	0.07263	95.6	75	125	0.9478	8.20	20	
Thallium	0.9868	0.0200	1.000		98.7	75	125	1.002	1.49	20	
Vanadium	0.9958	0.0100	1.000	0.0007756	99.5	75	125	1.013	1.69	20	
Zinc	0.9778	0.0200	1.000	0.01295	96.5	75	125	0.9925	1.50	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202589

Sample ID: **MB-202589** Client ID: Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6043727**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.21	0	50.00		94.4	70.6	123				
Surr: Dibromofluoromethane	49.63	0	50.00		99.3	78.7	124				
Surr: Toluene-d8	48.84	0	50.00		97.7	81.3	120				

Sample ID: **LCS-202589** Client ID: Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6043725**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.55	5.0	50.00		99.1	72.8	128				
Toluene	48.87	5.0	50.00		97.7	74.9	127				
Trichloroethene	48.07	5.0	50.00		96.1	70.5	134				
Surr: 4-Bromofluorobenzene	47.43	0	50.00		94.9	70.6	123				
Surr: Dibromofluoromethane	49.31	0	50.00		98.6	78.7	124				
Surr: Toluene-d8	48.11	0	50.00		96.2	81.3	120				

Sample ID: **1501N94-006AMS** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6045218**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	50.61	5.0	50.00		101	70	135				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202589

Sample ID: **1501N94-006AMS** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6045218**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	42.76	5.0	50.00		85.5	70.5	137				
Trichloroethene	47.85	5.0	50.00		95.7	71.8	139				
Surr: 4-Bromofluorobenzene	45.75	0	50.00		91.5	70.6	123				
Surr: Dibromofluoromethane	50.67	0	50.00		101	78.7	124				
Surr: Toluene-d8	49.20	0	50.00		98.4	81.3	120				

Sample ID: **1501N94-007AMS** Client ID: **MW-401SAP-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **285757**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/13/2015** Seq No: **6064112**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.28	5.0	50.00		94.6	70	135				H
Toluene	48.08	5.0	50.00		96.2	70.5	137				H
Trichloroethene	68.56	5.0	50.00	18.94	99.2	71.8	139				H
Surr: 4-Bromofluorobenzene	47.92	0	50.00		95.8	70.6	123				H
Surr: Dibromofluoromethane	51.50	0	50.00		103	78.7	124				H
Surr: Toluene-d8	48.13	0	50.00		96.3	81.3	120				H

Sample ID: **1501N94-008AMS** Client ID: **MW-309BR-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6046504**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.87	5.0	50.00		99.7	70	135				
Toluene	49.07	5.0	50.00		98.1	70.5	137				
Trichloroethene	47.87	5.0	50.00		95.7	71.8	139				
Surr: 4-Bromofluorobenzene	46.78	0	50.00		93.6	70.6	123				
Surr: Dibromofluoromethane	48.75	0	50.00		97.5	78.7	124				
Surr: Toluene-d8	47.83	0	50.00		95.7	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202589

Sample ID: **1501N94-006AMSD** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6045219**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	47.95	5.0	50.00		95.9	70	135	50.61	5.40	20	
Toluene	47.29	5.0	50.00		94.6	70.5	137	42.76	10.1	20	
Trichloroethene	45.88	5.0	50.00		91.8	71.8	139	47.85	4.20	20	
Surr: 4-Bromofluorobenzene	46.63	0	50.00		93.3	70.6	123	45.75	0	0	
Surr: Dibromofluoromethane	48.83	0	50.00		97.7	78.7	124	50.67	0	0	
Surr: Toluene-d8	48.27	0	50.00		96.5	81.3	120	49.20	0	0	

Sample ID: **1501N94-007AMSD** Client ID: **MW-401SAP-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **285757**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/13/2015** Seq No: **6064232**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.71	5.0	50.00		93.4	70	135	47.28	1.21	20	H
Toluene	48.47	5.0	50.00		96.9	70.5	137	48.08	0.808	20	H
Trichloroethene	67.87	5.0	50.00	18.94	97.9	71.8	139	68.56	1.01	20	H
Surr: 4-Bromofluorobenzene	49.02	0	50.00		98.0	70.6	123	47.92	0	0	H
Surr: Dibromofluoromethane	52.22	0	50.00		104	78.7	124	51.50	0	0	H
Surr: Toluene-d8	47.76	0	50.00		95.5	81.3	120	48.13	0	0	H

Sample ID: **1501N94-008AMSD** Client ID: **MW-309BR-20150129-01** Units: **ug/L** Prep Date: **02/03/2015** Run No: **284956**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **202589** Analysis Date: **02/03/2015** Seq No: **6046505**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.30	5.0	50.00		98.6	70	135	49.87	1.15	20	
Toluene	49.55	5.0	50.00		99.1	70.5	137	49.07	0.973	20	
Trichloroethene	47.59	5.0	50.00		95.2	71.8	139	47.87	0.587	20	
Surr: 4-Bromofluorobenzene	47.28	0	50.00		94.6	70.6	123	46.78	0	0	
Surr: Dibromofluoromethane	49.47	0	50.00		98.9	78.7	124	48.75	0	0	
Surr: Toluene-d8	48.65	0	50.00		97.3	81.3	120	47.83	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202639

Sample ID: **MB-202639**	Client ID:			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-202639**	Client ID:			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050627**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004928	0.00020	0.0050		98.6	80	120				

Sample ID: **1501N94-006CMS**	Client ID: **MW-207-20150129-01**			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050629**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004728	0.00020	0.0050		94.6	70	130				

Sample ID: **1501N94-007DMS**	Client ID: **MW-401SAP-20150129-01**			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050633**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005186	0.00020	0.0050	0.0003808	96.1	70	130				

Sample ID: **1501N94-008DMS**	Client ID: **MW-309BR-20150129-01**			Units: **mg/L**	Prep Date: **02/04/2015**	Run No: **285240**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**			BatchID: **202639**	Analysis Date: **02/05/2015**	Seq No: **6050638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004798	0.00020	0.0050		96.0	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202639

Sample ID: **1501P17-023AMS**	Client ID:				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050641**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.004009	0.00020	0.0050	0.0001547	77.1	70	130			

Sample ID: **1501N94-006CMSD**	Client ID: **MW-207-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050630**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.004855	0.00020	0.0050		97.1	70	130	0.004728	2.66	20

Sample ID: **1501N94-007DMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050636**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.005025	0.00020	0.0050	0.0003808	92.9	70	130	0.005186	3.17	20

Sample ID: **1501N94-008DMSD**	Client ID: **MW-309BR-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050639**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.005018	0.00020	0.0050		100	70	130	0.004798	4.49	20

Sample ID: **1501P17-023AMSD**	Client ID:				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285240**	
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **202639**		Analysis Date: **02/05/2015**		Seq No: **6050642**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Mercury	0.004062	0.00020	0.0050	0.0001547	78.1	70	130	0.004009	1.30	20

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **MB-202663**	Client ID:		Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MBLK**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D**		BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6050657**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	BRL	0.10									
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	BRL	0.050									
Pyrene	BRL	0.050									
Surr: 4-Terphenyl-d14	1.603	0	2.000		80.1	55.4	136				

Sample ID: **LCS-202663**	Client ID:		Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **LCS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D**		BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6050659**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.722	0.50	2.000		86.1	66.3	118				
Acenaphthylene	1.744	1.0	2.000		87.2	64	120				
Anthracene	1.775	0.050	2.000		88.8	64.6	127				
Benz(a)anthracene	1.844	0.050	2.000		92.2	60.6	137				
Benzo(a)pyrene	1.676	0.050	2.000		83.8	64	124				
Benzo(b)fluoranthene	1.937	0.10	2.000		96.9	56.4	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **LCS-202663** Client ID: Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6050659**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.796	0.10	2.000		89.8	49.9	137				
Benzo(k)fluoranthene	1.796	0.050	2.000		89.8	61.7	137				
Chrysene	1.748	0.050	2.000		87.4	65.5	127				
Dibenz(a,h)anthracene	1.683	0.10	2.000		84.2	52.4	130				
Fluoranthene	1.755	0.10	2.000		87.8	67	131				
Fluorene	1.767	0.10	2.000		88.4	68.3	120				
Indeno(1,2,3-cd)pyrene	1.757	0.050	2.000		87.9	50.4	139				
Naphthalene	1.694	0.50	2.000		84.7	61.1	120				
Phenanthrene	1.744	0.050	2.000		87.2	68	119				
Pyrene	1.707	0.050	2.000		85.4	62	127				
Surr: 4-Terphenyl-d14	1.601	0	2.000		80.1	55.4	136				

Sample ID: **1501N94-006BMS** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6051679**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.557	0.50	2.000	0.05087	75.3	45.6	120				
Acenaphthylene	1.573	1.0	2.000	0.1776	69.8	48.3	124				
Anthracene	1.611	0.050	2.000	0.05080	78.0	57.7	124				
Benz(a)anthracene	1.784	0.050	2.000		89.2	50.3	143				
Benzo(a)pyrene	1.473	0.050	2.000		73.6	44.2	127				
Benzo(b)fluoranthene	1.828	0.10	2.000		91.4	48.4	125				
Benzo(g,h,i)perylene	1.440	0.10	2.000		72.0	40.2	122				
Benzo(k)fluoranthene	1.522	0.050	2.000		76.1	45.5	122				
Chrysene	1.488	0.050	2.000		74.4	46	124				
Dibenz(a,h)anthracene	1.208	0.10	2.000		60.4	40.1	128				
Fluoranthene	1.654	0.10	2.000	0.01574	81.9	58	127				
Fluorene	1.654	0.10	2.000	0.04070	80.6	52.6	124				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-006BMS**	Client ID: **MW-207-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051679**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.344	0.050	2.000		67.2	40.3	129				
Naphthalene	1.485	0.50	2.000	0.1958	64.4	46.6	120				
Phenanthrene	1.590	0.050	2.000	0.03482	77.7	50.6	122				
Pyrene	1.622	0.050	2.000	0.02173	80.0	50.1	128				
Surr: 4-Terphenyl-d14	1.489	0	2.000		74.4	55.4	136				

Sample ID: **1501N94-007CMS**	Client ID: **MW-401SAP-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051677**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.670	0.50	2.000	0.02650	82.2	45.6	120				
Acenaphthylene	1.684	1.0	2.000	0.05978	81.2	48.3	124				
Anthracene	1.737	0.050	2.000	0.02400	85.7	57.7	124				
Benz(a)anthracene	1.825	0.050	2.000		91.3	50.3	143				
Benzo(a)pyrene	1.600	0.050	2.000		80.0	44.2	127				
Benzo(b)fluoranthene	1.958	0.10	2.000		97.9	48.4	125				
Benzo(g,h,i)perylene	1.609	0.10	2.000		80.5	40.2	122				
Benzo(k)fluoranthene	1.735	0.050	2.000		86.8	45.5	122				
Chrysene	1.694	0.050	2.000		84.7	46	124				
Dibenz(a,h)anthracene	1.519	0.10	2.000		75.9	40.1	128				
Fluoranthene	1.754	0.10	2.000		87.7	58	127				
Fluorene	1.709	0.10	2.000		85.5	52.6	124				
Indeno(1,2,3-cd)pyrene	1.601	0.050	2.000		80.1	40.3	129				
Naphthalene	1.756	0.50	2.000	0.1006	82.8	46.6	120				
Phenanthrene	1.693	0.050	2.000	0.01905	83.7	50.6	122				
Pyrene	1.642	0.050	2.000	0.01586	81.3	50.1	128				
Surr: 4-Terphenyl-d14	1.564	0	2.000		78.2	55.4	136				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-008CMS**	Client ID: **MW-309BR-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MS**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051675**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.701	0.50	2.000		85.0	45.6	120				
Acenaphthylene	1.713	1.0	2.000	0.04630	83.3	48.3	124				
Anthracene	1.747	0.050	2.000	0.02119	86.3	57.7	124				
Benz(a)anthracene	1.834	0.050	2.000		91.7	50.3	143				
Benzo(a)pyrene	1.511	0.050	2.000		75.5	44.2	127				
Benzo(b)fluoranthene	1.829	0.10	2.000		91.4	48.4	125				
Benzo(g,h,i)perylene	1.474	0.10	2.000		73.7	40.2	122				
Benzo(k)fluoranthene	1.578	0.050	2.000		78.9	45.5	122				
Chrysene	1.680	0.050	2.000		84.0	46	124				
Dibenz(a,h)anthracene	1.364	0.10	2.000		68.2	40.1	128				
Fluoranthene	1.804	0.10	2.000	0.01499	89.4	58	127				
Fluorene	1.777	0.10	2.000		88.9	52.6	124				
Indeno(1,2,3-cd)pyrene	1.412	0.050	2.000		70.6	40.3	129				
Naphthalene	1.730	0.50	2.000	0.02188	85.4	46.6	120				
Phenanthrene	1.712	0.050	2.000	0.02030	84.6	50.6	122				
Pyrene	1.721	0.050	2.000	0.01923	85.1	50.1	128				
Surr: 4-Terphenyl-d14	1.563	0	2.000		78.2	55.4	136				

Sample ID: **1501N94-006BMSD**	Client ID: **MW-207-20150129-01**			Units: **ug/L**	Prep Date: **02/05/2015**	Run No: **285236**
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**			BatchID: **202663**	Analysis Date: **02/05/2015**	Seq No: **6051680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.766	0.50	2.000	0.05087	85.8	45.6	120	1.557	12.6	29.4	
Acenaphthylene	1.745	1.0	2.000	0.1776	78.4	48.3	124	1.573	10.4	32.5	
Anthracene	1.779	0.050	2.000	0.05080	86.4	57.7	124	1.611	9.87	21.9	
Benz(a)anthracene	1.810	0.050	2.000		90.5	50.3	143	1.784	1.48	26.8	
Benzo(a)pyrene	1.508	0.050	2.000		75.4	44.2	127	1.473	2.38	40.9	
Benzo(b)fluoranthene	1.778	0.10	2.000		88.9	48.4	125	1.828	2.73	24.2	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-006BMSD** Client ID: **MW-207-20150129-01** Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6051680**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	1.435	0.10	2.000		71.7	40.2	122	1.440	0.345	26.2	
Benzo(k)fluoranthene	1.610	0.050	2.000		80.5	45.5	122	1.522	5.64	23.3	
Chrysene	1.624	0.050	2.000		81.2	46	124	1.488	8.72	25	
Dibenz(a,h)anthracene	1.297	0.10	2.000		64.8	40.1	128	1.208	7.05	23.6	
Fluoranthene	1.788	0.10	2.000	0.01574	88.6	58	127	1.654	7.79	23.5	
Fluorene	1.817	0.10	2.000	0.04070	88.8	52.6	124	1.654	9.39	31.5	
Indeno(1,2,3-cd)pyrene	1.373	0.050	2.000		68.7	40.3	129	1.344	2.13	28.8	
Naphthalene	1.746	0.50	2.000	0.1958	77.5	46.6	120	1.485	16.2	22.9	
Phenanthrene	1.743	0.050	2.000	0.03482	85.4	50.6	122	1.590	9.18	20.2	
Pyrene	1.705	0.050	2.000	0.02173	84.2	50.1	128	1.622	4.99	24.7	
Surr: 4-Terphenyl-d14	1.548	0	2.000		77.4	55.4	136	1.489	0	0	

Sample ID: **1501N94-007CMSD** Client ID: **MW-401SAP-20150129-01** Units: **ug/L** Prep Date: **02/05/2015** Run No: **285236**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **202663** Analysis Date: **02/05/2015** Seq No: **6051678**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.876	0.50	2.000	0.02650	92.5	45.6	120	1.670	11.6	29.4	
Acenaphthylene	1.748	1.0	2.000	0.05978	84.4	48.3	124	1.684	3.71	32.5	
Anthracene	1.807	0.050	2.000	0.02400	89.2	57.7	124	1.737	3.94	21.9	
Benz(a)anthracene	1.896	0.050	2.000		94.8	50.3	143	1.825	3.78	26.8	
Benzo(a)pyrene	1.657	0.050	2.000		82.8	44.2	127	1.600	3.50	40.9	
Benzo(b)fluoranthene	1.986	0.10	2.000		99.3	48.4	125	1.958	1.44	24.2	
Benzo(g,h,i)perylene	1.496	0.10	2.000		74.8	40.2	122	1.609	7.32	26.2	
Benzo(k)fluoranthene	1.797	0.050	2.000		89.9	45.5	122	1.735	3.51	23.3	
Chrysene	1.701	0.050	2.000		85.0	46	124	1.694	0.383	25	
Dibenz(a,h)anthracene	1.325	0.10	2.000		66.3	40.1	128	1.519	13.6	23.6	
Fluoranthene	1.830	0.10	2.000		91.5	58	127	1.754	4.27	23.5	
Fluorene	1.809	0.10	2.000		90.4	52.6	124	1.709	5.66	31.5	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202663

Sample ID: **1501N94-007CMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **ug/L**		Prep Date: **02/05/2015**		Run No: **285236**	
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**				BatchID: **202663**		Analysis Date: **02/05/2015**		Seq No: **6051678**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Indeno(1,2,3-cd)pyrene	1.514	0.050	2.000		75.7	40.3	129	1.601	5.62	28.8
Naphthalene	1.797	0.50	2.000	0.1006	84.8	46.6	120	1.756	2.30	22.9
Phenanthrene	1.763	0.050	2.000	0.01905	87.2	50.6	122	1.693	4.06	20.2
Pyrene	1.770	0.050	2.000	0.01586	87.7	50.1	128	1.642	7.46	24.7
Surr: 4-Terphenyl-d14	1.605	0	2.000		80.2	55.4	136	1.564	0	0

Sample ID: **1501N94-008CMSD**	Client ID: **MW-309BR-20150129-01**				Units: **ug/L**		Prep Date: **02/05/2015**		Run No: **285236**	
SampleType: **MSD**	TestCode: **SIM Polynuclear Aromatic Hydrocarbons** **SW8270D**				BatchID: **202663**		Analysis Date: **02/05/2015**		Seq No: **6051676**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Acenaphthene	1.761	0.50	2.000		88.1	45.6	120	1.701	3.49	29.4
Acenaphthylene	1.807	1.0	2.000	0.04630	88.0	48.3	124	1.713	5.35	32.5
Anthracene	1.715	0.050	2.000	0.02119	84.7	57.7	124	1.747	1.87	21.9
Benz(a)anthracene	1.883	0.050	2.000		94.2	50.3	143	1.834	2.67	26.8
Benzo(a)pyrene	1.532	0.050	2.000		76.6	44.2	127	1.511	1.36	40.9
Benzo(b)fluoranthene	1.883	0.10	2.000		94.1	48.4	125	1.829	2.91	24.2
Benzo(g,h,i)perylene	1.506	0.10	2.000		75.3	40.2	122	1.474	2.08	26.2
Benzo(k)fluoranthene	1.526	0.050	2.000		76.3	45.5	122	1.578	3.31	23.3
Chrysene	1.588	0.050	2.000		79.4	46	124	1.680	5.60	25
Dibenz(a,h)anthracene	1.179	0.10	2.000		58.9	40.1	128	1.364	14.5	23.6
Fluoranthene	1.762	0.10	2.000	0.01499	87.4	58	127	1.804	2.31	23.5
Fluorene	1.842	0.10	2.000		92.1	52.6	124	1.777	3.55	31.5
Indeno(1,2,3-cd)pyrene	1.373	0.050	2.000		68.6	40.3	129	1.412	2.82	28.8
Naphthalene	1.752	0.50	2.000	0.02188	86.5	46.6	120	1.730	1.28	22.9
Phenanthrene	1.723	0.050	2.000	0.02030	85.2	50.6	122	1.712	0.684	20.2
Pyrene	1.786	0.050	2.000	0.01923	88.3	50.1	128	1.721	3.67	24.7
Surr: 4-Terphenyl-d14	1.587	0	2.000		79.3	55.4	136	1.563	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202688

Sample ID: **MB-202688**	Client ID:				Units: **mg/L**		Prep Date: **02/03/2015**		Run No: **285156**
SampleType: **MBLK**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/03/2015**		Seq No: **6048353**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-202688**	Client ID:				Units: **mg/L**		Prep Date: **02/03/2015**		Run No: **285156**
SampleType: **LCS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/03/2015**		Seq No: **6048354**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2686	0.010	0.2500		107	90	110				

Sample ID: **1501M91-003AMS**	Client ID:				Units: **mg/L**		Prep Date: **02/03/2015**		Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/03/2015**		Seq No: **6048363**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2647	0.010	0.2500	0.003900	104	90	110				

Sample ID: **1501N94-006DMS**	Client ID: **MW-207-20150129-01**				Units: **mg/L**		Prep Date: **02/04/2015**		Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/04/2015**		Seq No: **6048376**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2270	0.010	0.2500	0.006600	88.2	90	110				S

Sample ID: **1501N94-007EMS**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/13/2015**		Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**				BatchID: **202688**		Analysis Date: **02/13/2015**		Seq No: **6072584**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1328	0.010	0.2500	0.006000	50.7	90	110				SH

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 202688

Sample ID: **1501N94-008EMS**	Client ID: **MW-309BR-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MS**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1652	0.010	0.2500	0.006600	63.4	90	110				SH

Sample ID: **1501M91-003AMSD**	Client ID:	Units: **mg/L**	Prep Date: **02/03/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/03/2015**	Seq No: **6048364**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2656	0.010	0.2500	0.003900	105	90	110	0.2647	0.339	20	

Sample ID: **1501N94-006DMSD**	Client ID: **MW-207-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072583**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2069	0.010	0.2500	0.006600	80.1	90	110	0.2270	9.26	20	SH

Sample ID: **1501N94-007EMSD**	Client ID: **MW-401SAP-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072585**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1331	0.010	0.2500	0.006000	50.8	90	110	0.1328	0.226	20	SH

Sample ID: **1501N94-008EMSD**	Client ID: **MW-309BR-20150129-01**	Units: **mg/L**	Prep Date: **02/13/2015**	Run No: **285156**
SampleType: **MSD**	TestCode: **Total Cyanide (SM4500 CN-C, E)**	BatchID: **202688**	Analysis Date: **02/13/2015**	Seq No: **6072587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.1655	0.010	0.2500	0.006600	63.6	90	110	0.1652	0.181	20	SH

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: 203295

Sample ID: **MB-203295**	Client ID:				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069964**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-203295**	Client ID:				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069965**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004771	0.00020	0.0050		95.4	80	120				

Sample ID: **1501N94-007DMS**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069967**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005015	0.00020	0.0050	0.0003591	93.1	70	130				

Sample ID: **1501N94-007DMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date: **02/17/2015**		Run No: **286028**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **203295**		Analysis Date: **02/17/2015**		Seq No: **6069968**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004897	0.00020	0.0050	0.0003591	90.8	70	130	0.005015	2.38	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R284868

Sample ID: **MB-R284868**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MBLK**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041257**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R284868**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **LCS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5215	0.100	0.5000		104	85	115				

Sample ID: **1501N94-007FMS**	Client ID: **MW-401SAP-20150129-01**			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041293**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5215	0.100	0.5000		104	80	120				

Sample ID: **1501N94-008FMS**	Client ID: **MW-309BR-20150129-01**			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MS**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041262**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.6172	0.100	0.5000	0.1193	99.6	80	120				

Sample ID: **1501N94-007FMSD**	Client ID: **MW-401SAP-20150129-01**			Units: **mg/L**	Prep Date:	Run No: **284868**
SampleType: **MSD**	TestCode: **Ferrous Iron** **SM3500-Fe-B**			BatchID: **R284868**	Analysis Date: **01/30/2015**	Seq No: **6041299**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5215	0.100	0.5000		104	80	120	0.5215	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R284868

Sample ID: **1501N94-008FMSD** Client ID: **MW-309BR-20150129-01** Units: **mg/L** Prep Date: Run No: **284868**
SampleType: **MSD** TestCode: **Ferrous Iron SM3500-Fe-B** BatchID: **R284868** Analysis Date: **01/30/2015** Seq No: **6041272**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.6090	0.100	0.5000	0.1193	97.9	80	120	0.6172	1.34	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285013

Sample ID: **1501N94-007GDUP**	Client ID: **MW-401SAP-20150129-01**					Units: **mg/L**		Prep Date:		Run No: **285013**	
SampleType: **DUP**	TestCode: **CARBON DIOXIDE**	**SM4500-CO2**				BatchID: **R285013**		Analysis Date: **02/03/2015**		Seq No: **6045121**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Total Carbon Dioxide	70.60	10.0						0	0	20	

Sample ID: **1501N94-008GDUP**	Client ID: **MW-309BR-20150129-01**					Units: **mg/L**		Prep Date:		Run No: **285013**	
SampleType: **DUP**	TestCode: **CARBON DIOXIDE**	**SM4500-CO2**				BatchID: **R285013**		Analysis Date: **02/03/2015**		Seq No: **6045122**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Total Carbon Dioxide	44.53	10.0						0	0	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285097

Sample ID: **MB-R285097**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047017**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R285097**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047016**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.087	0.25	5.000		102	90	110				
Sulfate	26.84	1.0	25.00		107	90	110				

Sample ID: **1501N94-007GMS**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047023**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	8.059	0.25	5.000	2.589	109	90	110				
Sulfate	67.94	1.0	25.00	42.72	101	90	110				

Sample ID: **1501N94-008GMS**	Client ID: **MW-309BR-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047025**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	4.273	0.25	5.000		85.5	90	110				S
Sulfate	22.15	1.0	25.00	0.6368	86.1	90	110				S

Sample ID: **1501N94-007GMSD**	Client ID: **MW-401SAP-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285097**	
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**				BatchID: **R285097**		Analysis Date: **01/30/2015**		Seq No: **6047024**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	7.378	0.25	5.000	2.589	95.8	90	110	8.059	8.82	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285097

Sample ID: **1501N94-007GMSD**	Client ID: **MW-401SAP-20150129-01**	Units: **mg/L**	Prep Date:	Run No: **285097**
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**	BatchID: **R285097**	Analysis Date: **01/30/2015**	Seq No: **6047024**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	64.38	1.0	25.00	42.72	86.7	90	110	67.94	5.37	20	S

Sample ID: **1501N94-008GMSD**	Client ID: **MW-309BR-20150129-01**	Units: **mg/L**	Prep Date:	Run No: **285097**
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**	BatchID: **R285097**	Analysis Date: **02/13/2015**	Seq No: **6064515**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	5.153	0.25	5.000		103	90	110	4.273	18.7	20	H
Sulfate	25.00	1.0	25.00	0.6368	97.5	90	110	22.15	12.1	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta
Workorder: 1501N94

ANALYTICAL QC SUMMARY REPORT

BatchID: R285387

Sample ID: **MB-R285387**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **285387**	
SampleType: **MBLK**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R285387**		Analysis Date: **02/09/2015**		Seq No: **6054373**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	BRL	1.00									

Sample ID: **1501N94-003GDUP**	Client ID: **DUP-06-20150129-01**				Units: **mg/L**		Prep Date:		Run No: **285387**	
SampleType: **DUP**	TestCode: **Dissolved Oxygen by SM4500-O-G**				BatchID: **R285387**		Analysis Date: **02/09/2015**		Seq No: **6054382**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Oxygen, Dissolved	8.440	1.00		8.450				0	0	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 10, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1409143

Analytical Environmental Services, Inc. received 3 samples on 9/3/2014 12:33:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1409143

Date: 9/3/14 Page 1 of 1

COMPANY: ERM

ADDRESS: 3200 Windy Hill Road SE Suite 1500W Atlanta, GA 30339

PHONE: 678-486-2700

FAX:

SAMPLED BY: Charlie Brooks & Austin Kelly

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	BTEX by 624 Wastewater	Barium	pH	Sb, Cr, Cu, Ni, Hexavalent Cr										REMARKS	No # of Containers
	PRESERVATION (See codes)						HCL	N		N											
1	Trip Blank	9/3/14	—			W	X														2
2	Effluent Grab	9/3/14	900	X		GW	X	X	X												4
3	Effluent Composite	9/3/14	900		X	GW				X	X										2
4																					
5																					
6																					
7																					
8																					
9																					
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11																					
12																					
13																					
14																					

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY / DATE/TIME
1: Austin Kelly 9/3/14 12:33pm
2:
3:

RECEIVED BY / DATE/TIME
1: Cataya Reeves 9/3/14 12:33
2:
3:

PROJECT INFORMATION
PROJECT NAME: AGLC Augusta Effluent
PROJECT #: 0230712
SITE ADDRESS: Augusta, GA
SEND REPORT TO: greg.jirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 8

Turnaround Time Request
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 10-Sep-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1409143

Case Narrative

Sample Receiving Nonconformance:

Sample 1409143-002C for pH analysis by Method SM4500 H+ B was received and analyzed outside of the method specified holding time of immediate or 15 minutes.

Analytical Environmental Services, Inc **Date:** 10-Sep-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIPBLANK
Project Name:	AGLC Augusta Effluent	**Collection Date:**	9/3/2014
Lab ID:	1409143-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
Ethylbenzene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
m,p-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
o-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
Toluene	BRL	5.0		ug/L	195849	1	09/05/2014 15:24	NH
Surr: 4-Bromofluorobenzene	93.4	66.2-120		%REC	195849	1	09/05/2014 15:24	NH
Surr: Dibromofluoromethane	83.2	79.5-121		%REC	195849	1	09/05/2014 15:24	NH
Surr: Toluene-d8	91.1	77-117		%REC	195849	1	09/05/2014 15:24	NH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Sep-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	9/3/2014 9:00:00 AM
Lab ID:	1409143-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.643	0.0100		mg/L	195753	1	09/04/2014 23:45	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	64	5.0		ug/L	195849	1	09/05/2014 21:26	NH
Ethylbenzene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
m,p-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
o-Xylene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
Toluene	BRL	5.0		ug/L	195849	1	09/05/2014 21:26	NH
Surr: 4-Bromofluorobenzene	93	66.2-120		%REC	195849	1	09/05/2014 21:26	NH
Surr: Dibromofluoromethane	81.5	79.5-121		%REC	195849	1	09/05/2014 21:26	NH
Surr: Toluene-d8	92.4	77-117		%REC	195849	1	09/05/2014 21:26	NH
Hydrogen Ion (pH) by SM4500 H+ B								
pH	6.74	0.0100	H	pH Units	R274959	1	09/03/2014 16:20	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 10-Sep-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	9/3/2014 9:00:00 AM
Lab ID:	1409143-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	195753	1	09/04/2014 17:22	JL
Chromium	BRL	0.0100		mg/L	195753	1	09/04/2014 17:22	JL
Copper	BRL	0.0250		mg/L	195753	1	09/04/2014 17:22	JL
Nickel	BRL	0.0200		mg/L	195753	1	09/04/2014 17:22	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R274960	1	09/03/2014 13:45	AB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1409143

Checklist completed by [signature] 9/3/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.6°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by BM

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 10-Sep-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab Order: 1409143

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1409143-001A	TRIPBLANK	9/3/2014 12:00:00AM	Aqueous	PP-VOLATILES		09/05/2014	09/05/2014
1409143-002A	EFFLUENT GRAB	9/3/2014 9:00:00AM	Groundwater	PP-VOLATILES		09/05/2014	09/05/2014
1409143-002B	EFFLUENT GRAB	9/3/2014 9:00:00AM	Groundwater	Total Metals by ICP		09/04/2014	09/04/2014
1409143-002C	EFFLUENT GRAB	9/3/2014 9:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			09/03/2014
1409143-003A	EFFLUENT COMPOSITE	9/3/2014 9:00:00AM	Groundwater	Total Metals by ICP		09/04/2014	09/04/2014
1409143-003B	EFFLUENT COMPOSITE	9/3/2014 9:00:00AM	Groundwater	Hexavalent Chromium			09/03/2014

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195753

Sample ID: **MB-195753** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805491**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-195753** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805495**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.088	0.0600	1.000	0.004453	108	85	115				
Barium	1.066	0.0100	1.000		107	85	115				
Chromium	1.052	0.0100	1.000		105	85	115				
Copper	1.053	0.0250	1.000		105	85	115				
Nickel	1.057	0.0200	1.000		106	85	115				

Sample ID: **1409078-001AMS** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805497**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.077	0.0600	1.000	0.01314	106	70	130				
Barium	1.065	0.0100	1.000	0.01518	105	70	130				
Chromium	1.034	0.0100	1.000		103	70	130				
Copper	1.034	0.0250	1.000	0.0006094	103	70	130				
Nickel	1.029	0.0200	1.000		103	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195753

Sample ID: **1409143-003AMS** Client ID: **EFFLUENT COMPOSITE** Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805504**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.082	0.0600	1.000	0.005747	108	70	130				
Barium	1.659	0.0100	1.000	0.6510	101	70	130				
Chromium	1.032	0.0100	1.000		103	70	130				
Copper	1.031	0.0250	1.000		103	70	130				
Nickel	0.9949	0.0200	1.000		99.5	70	130				

Sample ID: **1409078-001AMSD** Client ID: Units: **mg/L** Prep Date: **09/04/2014** Run No: **275058**
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7** BatchID: **195753** Analysis Date: **09/04/2014** Seq No: **5805499**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.090	0.0600	1.000	0.01314	108	70	130	1.077	1.17	20	
Barium	1.064	0.0100	1.000	0.01518	105	70	130	1.065	0.110	20	
Chromium	1.034	0.0100	1.000		103	70	130	1.034	0.024	20	
Copper	1.036	0.0250	1.000	0.0006094	104	70	130	1.034	0.186	20	
Nickel	1.029	0.0200	1.000		103	70	130	1.029	0.016	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195849

Sample ID: **MB-195849** Client ID: Units: **ug/L** Prep Date: **09/05/2014** Run No: **275121**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **195849** Analysis Date: **09/05/2014** Seq No: **5807796**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.00									
Ethylbenzene	BRL	5.00									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	46.63	0	50.00		93.3	66.2	120				
Surr: Dibromofluoromethane	41.72	0	50.00		83.4	79.5	121				
Surr: Toluene-d8	45.27	0	50.00		90.5	77	117				

Sample ID: **LCS-195849** Client ID: Units: **ug/L** Prep Date: **09/05/2014** Run No: **275121**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **195849** Analysis Date: **09/05/2014** Seq No: **5807795**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.72	5.00	20.00		93.6	64	136				
Ethylbenzene	21.71	5.00	20.00		109	59	141				
m,p-Xylene	45.64	5.00	40.00		114	62.5	126				
o-Xylene	22.89	5.00	20.00		114	63.4	121				
Toluene	19.21	5.00	20.00		96.0	75	126				
Surr: 4-Bromofluorobenzene	48.67	0	50.00		97.3	66.2	120				
Surr: Dibromofluoromethane	43.23	0	50.00		86.5	79.5	121				
Surr: Toluene-d8	46.17	0	50.00		92.3	77	117				

Sample ID: **1408N85-004AMS** Client ID: Units: **ug/L** Prep Date: **09/05/2014** Run No: **275121**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **195849** Analysis Date: **09/05/2014** Seq No: **5807798**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.79	5.0	20.00		89.0	37	151				
Ethylbenzene	19.89	5.0	20.00		99.4	37	162				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: 195849

Sample ID: **1408N85-004AMS**	Client ID:			Units: **ug/L**		Prep Date: **09/05/2014**		Run No: **275121**	
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES E624**			BatchID: **195849**		Analysis Date: **09/05/2014**		Seq No: **5807798**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	41.83	5.0	40.00		105	71.5	145				
o-Xylene	21.19	5.0	20.00		106	72	140				
Toluene	17.77	5.0	20.00		88.8	47	150				
Surr: 4-Bromofluorobenzene	49.77	0	50.00		99.5	66.2	120				
Surr: Dibromofluoromethane	43.91	0	50.00		87.8	79.5	121				
Surr: Toluene-d8	45.36	0	50.00		90.7	77	117				

Sample ID: **1408N85-004AMSD**	Client ID:			Units: **ug/L**		Prep Date: **09/05/2014**		Run No: **275121**	
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES E624**			BatchID: **195849**		Analysis Date: **09/05/2014**		Seq No: **5807799**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.18	5.0	20.00		85.9	37	151	17.79	3.49	34.5	
Ethylbenzene	19.22	5.0	20.00		96.1	37	162	19.89	3.43	37.5	
m,p-Xylene	41.05	5.0	40.00		103	71.5	145	41.83	1.88	20.1	
o-Xylene	20.86	5.0	20.00		104	72	140	21.19	1.57	19.1	
Toluene	17.50	5.0	20.00		87.5	47	150	17.77	1.53	24	
Surr: 4-Bromofluorobenzene	48.78	0	50.00		97.6	66.2	120	49.77	0	0	
Surr: Dibromofluoromethane	44.17	0	50.00		88.3	79.5	121	43.91	0	0	
Surr: Toluene-d8	46.30	0	50.00		92.6	77	117	45.36	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: R274959

Sample ID: **LCS-R274959**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **274959**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R274959**		Analysis Date: **09/03/2014**		Seq No: **5803455**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.050	0.0100	7.000		101	90	110				

Sample ID: **1408N92-001BDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **274959**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R274959**		Analysis Date: **09/03/2014**		Seq No: **5803465**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.270	0.0100						7.260	0.138	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1409143

ANALYTICAL QC SUMMARY REPORT

BatchID: R274960

Sample ID: **MB-R274960**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803469**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R274960**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803470**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4837	0.010	0.5000		96.7	90	110				

Sample ID: **1409143-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803476**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4854	0.010	0.5000		97.1	85	115				

Sample ID: **1409143-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **274960**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R274960**	Analysis Date: **09/03/2014**	Seq No: **5803478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4941	0.010	0.5000		98.8	85	115	0.4854	1.78	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

October 20, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1410982

Analytical Environmental Services, Inc. received 3 samples on 10/10/2014 11:05:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1410982

Date: 10/10/14 Page 1 of 1

COMPANY: ERM

ADDRESS: 3200 Windy Hill Rd Suite 1500W Atlanta GA 30339

PHONE: 678-486-2700 FAX:

SAMPLED BY: Kevin Speracek + Austin Kelly SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	BTEX by 624	Barium	pH	Sb, Cr, Cu, Ni	Hexavalent Cr												No # of Containers
	PRESERVATION (See codes)						HCl	N		N													
1	Trip Blank	10/10/14	—			W	X																2
2	Effluent Grab	10/10/14	900	X		GW	X	X	X														4
3	Effluent Composite	10/10/14	900		X	GW				X	X												2
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

REMARKS

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	10/10/14 11:05	1: Catarina Reuco	10/10/14 11:05
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGLC Augusta Effluent

PROJECT #: 0230712

SITE ADDRESS: Augusta GA

SEND REPORT TO: greg.jurak@erm.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 8

Turnaround Time Request
- ☒ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 21-Oct-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1410982

Case Narrative

Sample Receiving Nonconformance:

Sample for pH analysis by Method SM4500 H+ B were received and analyzed outside Method specified holding time of immediate or 15 minutes.

Analytical Environmental Services, Inc **Date:** 20-Oct-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIPBLANK
Project Name:	AGLC Augusta Effluent	**Collection Date:**	10/10/2014
Lab ID:	1410982-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
Ethylbenzene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
m,p-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
o-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
Toluene	BRL	5.0		ug/L	197655	1	10/14/2014 03:23	AR
Surr: 4-Bromofluorobenzene	85.6	66.2-120		%REC	197655	1	10/14/2014 03:23	AR
Surr: Dibromofluoromethane	106	79.5-121		%REC	197655	1	10/14/2014 03:23	AR
Surr: Toluene-d8	95.2	77-117		%REC	197655	1	10/14/2014 03:23	AR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-Oct-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	10/10/2014 9:00:00 AM
Lab ID:	1410982-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.306	0.0100		mg/L	197807	1	10/17/2014 16:10	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
Ethylbenzene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
m,p-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
o-Xylene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
Toluene	BRL	5.0		ug/L	197655	1	10/14/2014 23:39	AR
Surr: 4-Bromofluorobenzene	98.7	66.2-120		%REC	197655	1	10/14/2014 23:39	AR
Surr: Dibromofluoromethane	93.8	79.5-121		%REC	197655	1	10/14/2014 23:39	AR
Surr: Toluene-d8	92.2	77-117		%REC	197655	1	10/14/2014 23:39	AR
Hydrogen Ion (pH) by SM4500 H+ B								
pH	8.60	0.0100	H	pH Units	R277903	1	10/15/2014 12:10	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-Oct-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	10/10/2014 9:00:00 AM
Lab ID:	1410982-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	197807	1	10/17/2014 16:13	JL
Chromium	BRL	0.0100		mg/L	197807	1	10/17/2014 16:13	JL
Copper	BRL	0.0250		mg/L	197807	1	10/17/2014 16:13	JL
Nickel	BRL	0.0200		mg/L	197807	1	10/17/2014 16:13	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R277699	1	10/10/2014 16:05	AB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1410982

Checklist completed by [signature] 10/10/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.6°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by BM

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 21-Oct-14

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab Order: 1410982

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1410982-001A	TRIPBLANK	10/10/2014 12:00:00AM	Aqueous	PP-VOLATILES		10/13/2014	10/14/2014
1410982-002A	EFFLUENT GRAB	10/10/2014 9:00:00AM	Groundwater	PP-VOLATILES		10/13/2014	10/14/2014
1410982-002B	EFFLUENT GRAB	10/10/2014 9:00:00AM	Groundwater	Total Metals by ICP		10/17/2014	10/17/2014
1410982-002C	EFFLUENT GRAB	10/10/2014 9:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			10/15/2014
1410982-003A	EFFLUENT COMPOSITE	10/10/2014 9:00:00AM	Groundwater	Total Metals by ICP		10/17/2014	10/17/2014
1410982-003B	EFFLUENT COMPOSITE	10/10/2014 9:00:00AM	Groundwater	Hexavalent Chromium			10/10/2014

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197655

Sample ID: **MB-197655** Client ID: Units: **ug/L** Prep Date: **10/13/2014** Run No: **277757**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **197655** Analysis Date: **10/13/2014** Seq No: **5871605**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	39.55	0	50.00		79.1	66.2	120				
Surr: Dibromofluoromethane	55.75	0	50.00		112	79.5	121				
Surr: Toluene-d8	49.37	0	50.00		98.7	77	117				

Sample ID: **LCS-197655** Client ID: Units: **ug/L** Prep Date: **10/13/2014** Run No: **277757**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **197655** Analysis Date: **10/14/2014** Seq No: **5871606**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	23.16	5.0	20.00		116	64	136				
Ethylbenzene	20.38	5.0	20.00		102	59	141				
m,p-Xylene	43.55	5.0	40.00		109	62.5	126				
o-Xylene	20.63	5.0	20.00		103	63.4	121				
Toluene	22.32	5.0	20.00		112	75	126				
Surr: 4-Bromofluorobenzene	48.83	0	50.00		97.7	66.2	120				
Surr: Dibromofluoromethane	52.38	0	50.00		105	79.5	121				
Surr: Toluene-d8	51.09	0	50.00		102	77	117				

Sample ID: **1410A52-001AMS** Client ID: Units: **ug/L** Prep Date: **10/13/2014** Run No: **277757**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **197655** Analysis Date: **10/14/2014** Seq No: **5871612**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	30.61	5.0	20.00	6.540	120	37	151				
Ethylbenzene	24.22	5.0	20.00		121	37	162				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197655

Sample ID: **1410A52-001AMS**	Client ID:			Units: **ug/L**	Prep Date: **10/13/2014**	Run No: **277757**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **197655**	Analysis Date: **10/14/2014**	Seq No: **5871612**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	50.73	5.0	40.00	2.690	120	71.5	145				
o-Xylene	25.46	5.0	20.00		127	72	140				
Toluene	30.25	5.0	20.00	6.530	119	47	150				
Surr: 4-Bromofluorobenzene	47.28	0	50.00		94.6	66.2	120				
Surr: Dibromofluoromethane	48.09	0	50.00		96.2	79.5	121				
Surr: Toluene-d8	48.95	0	50.00		97.9	77	117				

Sample ID: **1410A52-001AMSD**	Client ID:			Units: **ug/L**	Prep Date: **10/13/2014**	Run No: **277757**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **197655**	Analysis Date: **10/14/2014**	Seq No: **5871613**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	29.70	5.0	20.00	6.540	116	37	151	30.61	3.02	34.5	
Ethylbenzene	23.96	5.0	20.00		120	37	162	24.22	1.08	37.5	
m,p-Xylene	50.65	5.0	40.00	2.690	120	71.5	145	50.73	0.158	20.1	
o-Xylene	25.09	5.0	20.00		125	72	140	25.46	1.46	19.1	
Toluene	28.42	5.0	20.00	6.530	109	47	150	30.25	6.24	24	
Surr: 4-Bromofluorobenzene	48.48	0	50.00		97.0	66.2	120	47.28	0	0	
Surr: Dibromofluoromethane	46.95	0	50.00		93.9	79.5	121	48.09	0	0	
Surr: Toluene-d8	47.36	0	50.00		94.7	77	117	48.95	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197807

Sample ID: **MB-197807** Client ID: Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
SampleType: **MBLK** TestCode: **Total Metals by ICP** **E200.7** BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876623**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-197807** Client ID: Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
SampleType: **LCS** TestCode: **Total Metals by ICP** **E200.7** BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876624**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9719	0.0600	1.000		97.2	85	115				
Barium	0.9752	0.0100	1.000		97.5	85	115				
Chromium	0.9713	0.0100	1.000		97.1	85	115				
Copper	0.9873	0.0250	1.000	0.001629	98.6	85	115				
Nickel	0.9747	0.0200	1.000		97.5	85	115				

Sample ID: **1410D47-001FMS** Client ID: Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
SampleType: **MS** TestCode: **Total Metals by ICP** **E200.7** BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5877081**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9519	0.0600	1.000		95.2	70	130				
Barium	1.002	0.0100	1.000	0.03906	96.3	70	130				
Chromium	0.9689	0.0100	1.000	0.003444	96.5	70	130				
Copper	0.9798	0.0250	1.000	0.01113	96.9	70	130				
Nickel	0.9800	0.0200	1.000	0.001876	97.8	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: 197807

Sample ID: **1410E99-001BMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9546	0.0600	1.000	0.003082	95.2	70	130				
Barium	0.9399	0.0100	1.000	0.02951	91.0	70	130				
Chromium	0.9306	0.0100	1.000	0.003333	92.7	70	130				
Copper	0.9353	0.0250	1.000	0.01392	92.1	70	130				
Nickel	0.9212	0.0200	1.000		92.1	70	130				

Sample ID: **1410E99-001BMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **10/17/2014** Run No: **278091**
BatchID: **197807** Analysis Date: **10/17/2014** Seq No: **5876628**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9154	0.0600	1.000	0.003082	91.2	70	130	0.9546	4.20	20	
Barium	0.9032	0.0100	1.000	0.02951	87.4	70	130	0.9399	3.98	20	
Chromium	0.8928	0.0100	1.000	0.003333	88.9	70	130	0.9306	4.15	20	
Copper	0.9012	0.0250	1.000	0.01392	88.7	70	130	0.9353	3.72	20	
Nickel	0.9005	0.0200	1.000		90.0	70	130	0.9212	2.28	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: R277699

Sample ID: **MB-R277699**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868069**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R277699**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868070**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5004	0.010	0.5000		100	90	110				

Sample ID: **1410982-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868073**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4958	0.010	0.5000		99.2	85	115				

Sample ID: **1410982-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **277699**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R277699**	Analysis Date: **10/10/2014**	Seq No: **5868074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4883	0.010	0.5000		97.7	85	115	0.4958	1.52	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1410982

ANALYTICAL QC SUMMARY REPORT

BatchID: R277903

Sample ID: **LCS-R277903**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **277903**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R277903**		Analysis Date: **10/15/2014**		Seq No: **5872756**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.030	0.0100	7.000		100	90	110				

Sample ID: **1410904-001BDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **277903**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R277903**		Analysis Date: **10/15/2014**		Seq No: **5872772**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.570	0.0100						7.560	0.132	20	H

Sample ID: **1410A37-001CDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **277903**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R277903**		Analysis Date: **10/15/2014**		Seq No: **5872774**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	11.10	0.0100						11.08	0.180	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 14, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGL Augusta

Dear Greg Jirak: Order No: 1411157

Analytical Environmental Services, Inc. received 3 samples on 11/4/2014 1:30:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1411157

Date: 11/4/14 Page 1 of 1

COMPANY: ERM	ADDRESS: 3200 Windy Hill Rd. SE ste 1500W Atlanta, GA 30339
PHONE:	FAX:
SAMPLED BY: Charlie Brooks and Barrett Fisher	SIGNATURE: Barrett Fisher

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Volatiles 624s	Bis(2-ethylhexyl) phthalate	Barium	pH	Hexavalent Cr	Sb, Cr, Cu, Ni	No # of Containers	REMARKS
				PRESERVATION (See codes)										
1	Trip Blank	11/4/14	—	X		W	X						2	
2	Effluent Grab	↓	1000	X		GW	X	X	X	X			6	
3	Effluent Composite	↓	1000		X	GW					X	X	2	
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Barrett Fisher	11/4/14 1330	1: [signature]	11/4/14 13.30
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGL Augusta
PROJECT #: 0230712
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg Jirak
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers:

Turnaround Time Request
- ✓ Standard 5 Business Days
- 2 Business Day Rush
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 14-Nov-14

Client: ERM-Southeast
Project: AGL Augusta
Lab ID: 1411157

Case Narrative

Sample Receiving Nonconformance:

Sample 1411157-002B for pH analysis by Method SM4500 H+ B was received and analyzed outside of the method specified holding time of “immediate or 15 minutes”.

Analytical Environmental Services, Inc **Date:** 14-Nov-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIP BLANK
Project Name:	AGL Augusta	**Collection Date:**	11/4/2014
Lab ID:	1411157-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
Ethylbenzene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
m,p-Xylene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
o-Xylene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
Toluene	BRL	5.0		ug/L	198763	1	11/06/2014 04:59	AR
Surr: 4-Bromofluorobenzene	81.5	70.6-123		%REC	198763	1	11/06/2014 04:59	AR
Surr: Dibromofluoromethane	102	78.7-124		%REC	198763	1	11/06/2014 04:59	AR
Surr: Toluene-d8	96.7	81.3-120		%REC	198763	1	11/06/2014 04:59	AR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Nov-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGL Augusta	**Collection Date:**	11/4/2014 10:00:00 AM
Lab ID:	1411157-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.603	0.0100		mg/L	198716	1	11/05/2014 20:11	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
Ethylbenzene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
m,p-Xylene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
o-Xylene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
Toluene	BRL	5.0		ug/L	198763	1	11/05/2014 20:09	AR
Surr: 4-Bromofluorobenzene	82.3	70.6-123		%REC	198763	1	11/05/2014 20:09	AR
Surr: Dibromofluoromethane	99.8	78.7-124		%REC	198763	1	11/05/2014 20:09	AR
Surr: Toluene-d8	95.5	81.3-120		%REC	198763	1	11/05/2014 20:09	AR
PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625				**(E625)**				
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	198808	1	11/11/2014 03:13	YH
Surr: 2,4,6-Tribromophenol	80.2	51.5-124		%REC	198808	1	11/11/2014 03:13	YH
Surr: 2-Fluorobiphenyl	82.4	51.7-118		%REC	198808	1	11/11/2014 03:13	YH
Surr: 2-Fluorophenol	53.7	26-120		%REC	198808	1	11/11/2014 03:13	YH
Surr: 4-Terphenyl-d14	78.8	45.2-137		%REC	198808	1	11/11/2014 03:13	YH
Surr: Nitrobenzene-d5	82	42-120		%REC	198808	1	11/11/2014 03:13	YH
Surr: Phenol-d5	34.9	12.3-120		%REC	198808	1	11/11/2014 03:13	YH
Hydrogen Ion (pH) by SM4500 H+ B								
pH	6.66	0.0100	H	pH Units	R279659	1	11/10/2014 15:50	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 14-Nov-14

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGL Augusta	**Collection Date:**	11/4/2014 10:00:00 AM
Lab ID:	1411157-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	198716	1	11/05/2014 20:15	JL
Chromium	BRL	0.0100		mg/L	198716	1	11/05/2014 20:15	JL
Copper	BRL	0.0250		mg/L	198716	1	11/05/2014 20:15	JL
Nickel	BRL	0.0200		mg/L	198716	1	11/05/2014 20:15	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R279348	1	11/05/2014 06:55	AB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1411157

Checklist completed by [signature] 11/4/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes X JB 11/4/14 No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by JB

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 14-Nov-14

Client: ERM-Southeast
Project: AGL Augusta
Lab Order: 1411157

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1411157-001A	TRIP BLANK	11/4/2014 12:00:00AM	Aqueous	PP-VOLATILES		11/05/2014	11/06/2014
1411157-002A	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	PP-VOLATILES		11/05/2014	11/05/2014
1411157-002B	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			11/10/2014
1411157-002C	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	Total Metals by ICP		11/05/2014	11/05/2014
1411157-002D	EFFLUENT GRAB	11/4/2014 10:00:00AM	Groundwater	PP-SEMIVOLATILE ORGANICS		11/07/2014	11/11/2014
1411157-003A	EFFLUENT COMPOSITE	11/4/2014 10:00:00AM	Groundwater	Hexavalent Chromium			11/05/2014
1411157-003B	EFFLUENT COMPOSITE	11/4/2014 10:00:00AM	Groundwater	Total Metals by ICP		11/05/2014	11/05/2014

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198716

Sample ID: **MB-198716** Client ID: Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5906998**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-198716** Client ID: Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5906999**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.069	0.0600	1.000		107	85	115				
Barium	1.054	0.0100	1.000		105	85	115				
Chromium	1.048	0.0100	1.000		105	85	115				
Copper	1.028	0.0250	1.000	0.002789	102	85	115				
Nickel	1.057	0.0200	1.000		106	85	115				

Sample ID: **1411148-001AMS** Client ID: Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5907001**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.063	0.0600	1.000		106	70	130				
Barium	1.044	0.0100	1.000		104	70	130				
Chromium	1.039	0.0100	1.000		104	70	130				
Copper	1.018	0.0250	1.000		102	70	130				
Nickel	1.045	0.0200	1.000		105	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198716

Sample ID: **1411225-001AMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP** **E200.7**
Units: **mg/L** Prep Date: **11/06/2014** Run No: **279420**
BatchID: **198716** Analysis Date: **11/06/2014** Seq No: **5908785**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.055	0.0600	1.000		105	70	130				
Barium	1.003	0.0100	1.000	0.01131	99.2	70	130				
Chromium	1.021	0.0100	1.000	0.01137	101	70	130				
Copper	0.9988	0.0250	1.000	0.01594	98.3	70	130				
Nickel	0.9900	0.0200	1.000	0.005268	98.5	70	130				

Sample ID: **1411148-001AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP** **E200.7**
Units: **mg/L** Prep Date: **11/05/2014** Run No: **279420**
BatchID: **198716** Analysis Date: **11/05/2014** Seq No: **5907002**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.075	0.0600	1.000		107	70	130	1.063	1.08	20	
Barium	1.058	0.0100	1.000		106	70	130	1.044	1.38	20	
Chromium	1.052	0.0100	1.000		105	70	130	1.039	1.32	20	
Copper	1.033	0.0250	1.000		103	70	130	1.018	1.43	20	
Nickel	1.060	0.0200	1.000		106	70	130	1.045	1.36	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198763

Sample ID: **MB-198763**	Client ID:		Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MBLK**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**		BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	41.88	0	50.00		83.8	70.6	123				
Surr: Dibromofluoromethane	49.91	0	50.00		99.8	78.7	124				
Surr: Toluene-d8	47.96	0	50.00		95.9	81.3	120				

Sample ID: **LCS-198763**	Client ID:		Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **LCS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**		BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5907385**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	22.16	5.0	20.00		111	64	136				
Ethylbenzene	23.56	5.0	20.00		118	59	141				
m,p-Xylene	46.12	5.0	40.00		115	69.5	123				
o-Xylene	21.56	5.0	20.00		108	67.9	119				
Toluene	23.26	5.0	20.00		116	75	126				
Surr: 4-Bromofluorobenzene	44.23	0	50.00		88.5	70.6	123				
Surr: Dibromofluoromethane	50.40	0	50.00		101	78.7	124				
Surr: Toluene-d8	50.76	0	50.00		102	81.3	120				

Sample ID: **1411157-002AMS**	Client ID: **EFFLUENT GRAB**		Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**		BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906600**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	16.56	5.0	20.00		82.8	37	151				
Ethylbenzene	18.13	5.0	20.00		90.6	37	162				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198763

Sample ID: **1411157-002AMS**	Client ID: **EFFLUENT GRAB**			Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906600**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	36.23	5.0	40.00		90.6	71.5	145				
o-Xylene	16.39	5.0	20.00		82.0	72	140				
Toluene	17.74	5.0	20.00		88.7	47	150				
Surr: 4-Bromofluorobenzene	46.16	0	50.00		92.3	70.6	123				
Surr: Dibromofluoromethane	50.92	0	50.00		102	78.7	124				
Surr: Toluene-d8	50.14	0	50.00		100	81.3	120				

Sample ID: **1411157-002AMSD**	Client ID: **EFFLUENT GRAB**			Units: **ug/L**	Prep Date: **11/05/2014**	Run No: **279312**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **198763**	Analysis Date: **11/05/2014**	Seq No: **5906601**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.29	5.0	20.00		86.4	37	151	16.56	4.31	19.4	
Ethylbenzene	18.73	5.0	20.00		93.6	37	162	18.13	3.26	19.1	
m,p-Xylene	37.87	5.0	40.00		94.7	71.5	145	36.23	4.43	20.4	
o-Xylene	17.51	5.0	20.00		87.6	72	140	16.39	6.61	18.8	
Toluene	17.59	5.0	20.00		88.0	47	150	17.74	0.849	19.7	
Surr: 4-Bromofluorobenzene	45.06	0	50.00		90.1	70.6	123	46.16	0	0	
Surr: Dibromofluoromethane	50.59	0	50.00		101	78.7	124	50.92	0	0	
Surr: Toluene-d8	50.06	0	50.00		100	81.3	120	50.14	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198808

Sample ID: **MB-198808** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5909226**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	BRL	10									
Surr: 2,4,6-Tribromophenol	76.13	0	100.0		76.1	51.5	124				
Surr: 2-Fluorobiphenyl	29.12	0	50.00		58.2	51.7	118				
Surr: 2-Fluorophenol	53.27	0	100.0		53.3	26	120				
Surr: 4-Terphenyl-d14	37.62	0	50.00		75.2	45.2	137				
Surr: Nitrobenzene-d5	35.32	0	50.00		70.6	42	120				
Surr: Phenol-d5	35.40	0	100.0		35.4	12.3	120				

Sample ID: **LCS-198808** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5909417**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	95.49	10	100.0		95.5	28.9	136.88				
Surr: 2,4,6-Tribromophenol	111.8	0	100.0		112	51.5	124				
Surr: 2-Fluorobiphenyl	47.58	0	50.00		95.2	51.7	118				
Surr: 2-Fluorophenol	69.15	0	100.0		69.2	26	120				
Surr: 4-Terphenyl-d14	50.52	0	50.00		101	45.2	137				
Surr: Nitrobenzene-d5	51.02	0	50.00		102	42	120				
Surr: Phenol-d5	51.33	0	100.0		51.3	12.3	120				

Sample ID: **1411192-001BMS** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5910648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	68.40	50	100.0		68.4	8	158				
Surr: 2,4,6-Tribromophenol	84.40	0	100.0		84.4	51.5	124				
Surr: 2-Fluorobiphenyl	43.10	0	50.00		86.2	51.7	118				
Surr: 2-Fluorophenol	60.20	0	100.0		60.2	26	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: 198808

Sample ID: **1411192-001BMS** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5910648**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Terphenyl-d14	37.80	0	50.00		75.6	45.2	137				
Surr: Nitrobenzene-d5	40.70	0	50.00		81.4	42	120				
Surr: Phenol-d5	52.00	0	100.0		52.0	12.3	120				

Sample ID: **1411192-001BMSD** Client ID: Units: **ug/L** Prep Date: **11/07/2014** Run No: **279515**
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **198808** Analysis Date: **11/07/2014** Seq No: **5910651**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	82.20	50	100.0		82.2	8	158	68.40	18.3	41.1	
Surr: 2,4,6-Tribromophenol	97.40	0	100.0		97.4	51.5	124	84.40	0	0	
Surr: 2-Fluorobiphenyl	49.50	0	50.00		99.0	51.7	118	43.10	0	0	
Surr: 2-Fluorophenol	69.40	0	100.0		69.4	26	120	60.20	0	0	
Surr: 4-Terphenyl-d14	46.00	0	50.00		92.0	45.2	137	37.80	0	0	
Surr: Nitrobenzene-d5	46.20	0	50.00		92.4	42	120	40.70	0	0	
Surr: Phenol-d5	59.00	0	100.0		59.0	12.3	120	52.00	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: R279348

Sample ID: **MB-R279348** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **MBLK** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905183**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R279348** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **LCS** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905184**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5132	0.010	0.5000		103	90	110				

Sample ID: **1411084-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **MS** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905209**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5218	0.010	0.5000		104	85	115				

Sample ID: **1411084-002BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **279348**
SampleType: **MSD** TestCode: **Hexavalent Chromium** **SM3500-Cr B** BatchID: **R279348** Analysis Date: **11/04/2014** Seq No: **5905221**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5305	0.010	0.5000		106	85	115	0.5218	1.65	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1411157

ANALYTICAL QC SUMMARY REPORT

BatchID: R279659

Sample ID: **LCS-R279659**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911970**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.050	0.0100	7.000		101	90	110				

Sample ID: **1410H04-003ADUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911992**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.810	0.0100						7.790	0.256	20	H

Sample ID: **1411120-001BDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911989**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	10.27	0.0100						10.30	0.292	20	H

Sample ID: **1411157-002BDUP**	Client ID: **EFFLUENT GRAB**				Units: **pH Units**		Prep Date:		Run No: **279659**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R279659**		Analysis Date: **11/10/2014**		Seq No: **5911981**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	6.670	0.0100						6.660	0.150	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 17, 2014

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Effluent

Dear Greg Jirak: Order No: 1412749

Analytical Environmental Services, Inc. received 3 samples on December 9, 2014 11:55 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1412749

Date: 12/9/14 Page 1 of 1

COMPANY: ERM	ADDRESS: 3200 Windy Hill Road Suite 1500W Atlanta, GA 30339
PHONE: 678-486-2700	FAX:
SAMPLED BY: A Kelly + W. Virgo	SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	pH	BTEX by 624	Hex. Cr.	Barium	Sb, Cr, Cu, Ni	REMARKS	No # of Containers
1	AGLC Eff Grab	12/9/14	920	/		GW	1		2		1			4
2	AGLC Eff Composite	"	920		/	GW				1		1		2
3	Trip Blank	"	—			W			2					2
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														

Visit our website **www.aesatlanta.com** to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	12/9/14 11:55	1: Cataya Reeves	12/9/14 11:55
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGLC Effluent
PROJECT #: 0230712
SITE ADDRESS:
SEND REPORT TO: greg.jirak@erm.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers: 8

Turnaround Time Request
- (6) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? Y / N: Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 17-Dec-14

Client: ERM-Southeast
Project: AGLC Effluent
Lab ID: 1412749

Case Narrative

Sample Receiving Nonconformance:

Sample for pH analysis by Method E150.1/SM4500 H+ B was received and analyzed outside Method specified holding time of immediate or 15 minutes.

Analytical Environmental Services, Inc **Date:** 17-Dec-14

Client:	ERM-Southeast	**Client Sample ID:**	AGLC EFF GRAB
Project Name:	AGLC Effluent	**Collection Date:**	12/9/2014 9:20:00 AM
Lab ID:	1412749-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.669	0.0100		mg/L	200280	1	12/12/2014 00:19	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	46	5.0		ug/L	200521	1	12/16/2014 11:11	AR
Ethylbenzene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
m,p-Xylene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
o-Xylene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
Toluene	BRL	5.0		ug/L	200521	1	12/16/2014 11:11	AR
Surr: 4-Bromofluorobenzene	88	70.6-123		%REC	200521	1	12/16/2014 11:11	AR
Surr: Dibromofluoromethane	92.4	78.7-124		%REC	200521	1	12/16/2014 11:11	AR
Surr: Toluene-d8	90.4	81.3-120		%REC	200521	1	12/16/2014 11:11	AR
Hydrogen Ion (pH) by SM4500 H+ B								
pH	7.05	0.0100	H	pH Units	R281528	1	12/09/2014 14:05	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 17-Dec-14

Client:	ERM-Southeast	**Client Sample ID:**	AGLC EFF COMPOSITE
Project Name:	AGLC Effluent	**Collection Date:**	12/9/2014 9:20:00 AM
Lab ID:	1412749-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	200280	1	12/12/2014 00:23	JL
Chromium	BRL	0.0100		mg/L	200280	1	12/12/2014 00:23	JL
Copper	BRL	0.0250		mg/L	200280	1	12/12/2014 00:23	JL
Nickel	BRL	0.0200		mg/L	200280	1	12/12/2014 00:23	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R281510	1	12/09/2014 12:40	AB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 17-Dec-14

Client:	ERM-Southeast	**Client Sample ID:**	TRIPBLANK
Project Name:	AGLC Effluent	**Collection Date:**	12/9/2014
Lab ID:	1412749-003	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
Ethylbenzene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
m,p-Xylene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
o-Xylene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
Toluene	BRL	5.0		ug/L	200429	1	12/12/2014 12:46	AR
Surr: 4-Bromofluorobenzene	96.4	70.6-123		%REC	200429	1	12/12/2014 12:46	AR
Surr: Dibromofluoromethane	93.3	78.7-124		%REC	200429	1	12/12/2014 12:46	AR
Surr: Toluene-d8	98.6	81.3-120		%REC	200429	1	12/12/2014 12:46	AR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1412749

Checklist completed by [signature] 12/9/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.6°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by GM

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Analytical Environmental Services, Inc

Date: 18-Dec-14

Client: ERM-Southeast
Project: AGLC Effluent
Lab Order: 1412749

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1412749-001A	AGLC EFF GRAB	12/9/2014 9:20:00AM	Groundwater	PP-VOLATILES		12/15/2014	12/16/2014
1412749-001B	AGLC EFF GRAB	12/9/2014 9:20:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			12/09/2014
1412749-001C	AGLC EFF GRAB	12/9/2014 9:20:00AM	Groundwater	Total Metals by ICP		12/10/2014	12/12/2014
1412749-002A	AGLC EFF COMPOSITE	12/9/2014 9:20:00AM	Groundwater	Hexavalent Chromium			12/09/2014
1412749-002B	AGLC EFF COMPOSITE	12/9/2014 9:20:00AM	Groundwater	Total Metals by ICP		12/10/2014	12/12/2014
1412749-003A	TRIPBLANK	12/9/2014 12:00:00AM	Aqueous	PP-VOLATILES		12/12/2014	12/12/2014

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200280

Sample ID: **MB-200280** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963931**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-200280** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963932**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.009	0.0600	1.000		101	85	115				
Barium	1.004	0.0100	1.000		100	85	115				
Chromium	1.005	0.0100	1.000		100	85	115				
Copper	0.9942	0.0250	1.000		99.4	85	115				
Nickel	1.000	0.0200	1.000		100	85	115				

Sample ID: **1412822-005DMS** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963941**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9869	0.0600	1.000		98.7	70	130				
Barium	1.020	0.0100	1.000	0.04345	97.6	70	130				
Chromium	0.9799	0.0100	1.000		98.0	70	130				
Copper	0.9688	0.0250	1.000		96.9	70	130				
Nickel	0.9694	0.0200	1.000		96.9	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200280

Sample ID: **1412837-001FMS** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963934**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9846	0.0600	1.000		98.5	70	130				
Barium	0.9921	0.0100	1.000	0.01855	97.4	70	130				
Chromium	1.140	0.0100	1.000	0.1605	97.9	70	130				
Copper	0.9732	0.0250	1.000	0.004552	96.9	70	130				
Nickel	1.064	0.0200	1.000	0.09581	96.8	70	130				

Sample ID: **1412837-001FMSD** Client ID: Units: **mg/L** Prep Date: **12/10/2014** Run No: **281723**
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7** BatchID: **200280** Analysis Date: **12/11/2014** Seq No: **5963935**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9912	0.0600	1.000		99.1	70	130	0.9846	0.668	20	
Barium	1.006	0.0100	1.000	0.01855	98.7	70	130	0.9921	1.34	20	
Chromium	1.156	0.0100	1.000	0.1605	99.6	70	130	1.140	1.45	20	
Copper	0.9902	0.0250	1.000	0.004552	98.6	70	130	0.9732	1.73	20	
Nickel	1.077	0.0200	1.000	0.09581	98.1	70	130	1.064	1.20	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200429

Sample ID: **MB-200429** Client ID: Units: **ug/L** Prep Date: **12/12/2014** Run No: **281793**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200429** Analysis Date: **12/12/2014** Seq No: **5966186**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	46.42	0	50.00		92.8	70.6	123				
Surr: Dibromofluoromethane	44.47	0	50.00		88.9	78.7	124				
Surr: Toluene-d8	48.07	0	50.00		96.1	81.3	120				

Sample ID: **LCS-200429** Client ID: Units: **ug/L** Prep Date: **12/12/2014** Run No: **281793**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200429** Analysis Date: **12/12/2014** Seq No: **5966185**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.76	5.0	20.00		93.8	64	136				
Ethylbenzene	18.41	5.0	20.00		92.0	59	141				
m,p-Xylene	37.25	5.0	40.00		93.1	69.5	123				
o-Xylene	18.09	5.0	20.00		90.4	67.9	119				
Toluene	18.86	5.0	20.00		94.3	75	126				
Surr: 4-Bromofluorobenzene	50.18	0	50.00		100	70.6	123				
Surr: Dibromofluoromethane	46.29	0	50.00		92.6	78.7	124				
Surr: Toluene-d8	49.20	0	50.00		98.4	81.3	120				

Sample ID: **1412797-025AMS** Client ID: Units: **ug/L** Prep Date: **12/12/2014** Run No: **281793**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200429** Analysis Date: **12/12/2014** Seq No: **5977601**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.11	5.0	20.00		90.6	37	151				
Ethylbenzene	17.29	5.0	20.00		86.4	37	162				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200429

Sample ID: **1412797-025AMS**	Client ID:			Units: **ug/L**	Prep Date: **12/12/2014**	Run No: **281793**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200429**	Analysis Date: **12/12/2014**	Seq No: **5977601**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	35.47	5.0	40.00		88.7	71.5	145				
o-Xylene	17.51	5.0	20.00		87.6	72	140				
Toluene	18.21	5.0	20.00		91.0	47	150				
Surr: 4-Bromofluorobenzene	52.36	0	50.00		105	70.6	123				
Surr: Dibromofluoromethane	44.96	0	50.00		89.9	78.7	124				
Surr: Toluene-d8	50.40	0	50.00		101	81.3	120				

Sample ID: **1412797-025AMSD**	Client ID:			Units: **ug/L**	Prep Date: **12/12/2014**	Run No: **281793**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200429**	Analysis Date: **12/12/2014**	Seq No: **5977602**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	17.76	5.0	20.00		88.8	37	151	18.11	1.95	19.4	
Ethylbenzene	17.52	5.0	20.00		87.6	37	162	17.29	1.32	19.1	
m,p-Xylene	34.96	5.0	40.00		87.4	71.5	145	35.47	1.45	20.4	
o-Xylene	17.58	5.0	20.00		87.9	72	140	17.51	0.399	18.8	
Toluene	18.48	5.0	20.00		92.4	47	150	18.21	1.47	19.7	
Surr: 4-Bromofluorobenzene	51.76	0	50.00		104	70.6	123	52.36	0	0	
Surr: Dibromofluoromethane	45.02	0	50.00		90.0	78.7	124	44.96	0	0	
Surr: Toluene-d8	49.85	0	50.00		99.7	81.3	120	50.40	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200521

Sample ID: **MB-200521** Client ID: Units: **ug/L** Prep Date: **12/15/2014** Run No: **281862**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200521** Analysis Date: **12/15/2014** Seq No: **5972448**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	40.74	0	50.00		81.5	70.6	123				
Surr: Dibromofluoromethane	47.50	0	50.00		95.0	78.7	124				
Surr: Toluene-d8	48.10	0	50.00		96.2	81.3	120				

Sample ID: **LCS-200521** Client ID: Units: **ug/L** Prep Date: **12/15/2014** Run No: **281946**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200521** Analysis Date: **12/16/2014** Seq No: **5972739**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	15.59	5.0	20.00		78.0	64	136				
Ethylbenzene	16.04	5.0	20.00		80.2	59	141				
m,p-Xylene	31.53	5.0	40.00		78.8	69.5	123				
o-Xylene	15.36	5.0	20.00		76.8	67.9	119				
Toluene	15.64	5.0	20.00		78.2	75	126				
Surr: 4-Bromofluorobenzene	50.32	0	50.00		101	70.6	123				
Surr: Dibromofluoromethane	51.58	0	50.00		103	78.7	124				
Surr: Toluene-d8	51.32	0	50.00		103	81.3	120				

Sample ID: **1412D39-001AMS** Client ID: Units: **ug/L** Prep Date: **12/15/2014** Run No: **282042**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **200521** Analysis Date: **12/17/2014** Seq No: **5975398**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	21.75	5.0	20.00		109	37	151				
Ethylbenzene	18.23	5.0	20.00		91.2	37	162				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: 200521

Sample ID: **1412D39-001AMS**	Client ID:			Units: **ug/L**	Prep Date: **12/15/2014**	Run No: **282042**
SampleType: **MS**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200521**	Analysis Date: **12/17/2014**	Seq No: **5975398**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	37.38	5.0	40.00		93.4	71.5	145				
o-Xylene	17.69	5.0	20.00		88.4	72	140				
Toluene	21.07	5.0	20.00		105	47	150				
Surr: 4-Bromofluorobenzene	48.76	0	50.00		97.5	70.6	123				
Surr: Dibromofluoromethane	49.36	0	50.00		98.7	78.7	124				
Surr: Toluene-d8	50.77	0	50.00		102	81.3	120				

Sample ID: **1412D39-001AMSD**	Client ID:			Units: **ug/L**	Prep Date: **12/15/2014**	Run No: **282042**
SampleType: **MSD**	TestCode: **PRIORITY POLLUTANT-VOLATILES** **E624**			BatchID: **200521**	Analysis Date: **12/17/2014**	Seq No: **5975399**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	20.91	5.0	20.00		105	37	151	21.75	3.94	19.4	
Ethylbenzene	18.69	5.0	20.00		93.4	37	162	18.23	2.49	19.1	
m,p-Xylene	38.59	5.0	40.00		96.5	71.5	145	37.38	3.19	20.4	
o-Xylene	18.32	5.0	20.00		91.6	72	140	17.69	3.50	18.8	
Toluene	21.23	5.0	20.00		106	47	150	21.07	0.757	19.7	
Surr: 4-Bromofluorobenzene	49.05	0	50.00		98.1	70.6	123	48.76	0	0	
Surr: Dibromofluoromethane	48.06	0	50.00		96.1	78.7	124	49.36	0	0	
Surr: Toluene-d8	50.03	0	50.00		100	81.3	120	50.77	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: R281510

Sample ID: **MB-R281510**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958802**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R281510**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5068	0.010	0.5000		101	90	110				

Sample ID: **1412680-001DMS**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958808**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4993	0.010	0.5000		99.9	85	115				

Sample ID: **1412680-001DMSD**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **281510**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R281510**	Analysis Date: **12/08/2014**	Seq No: **5958812**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.5103	0.010	0.5000		102	85	115	0.4993	2.18	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Effluent
Workorder: 1412749

ANALYTICAL QC SUMMARY REPORT

BatchID: R281528

Sample ID: **LCS-R281528**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **281528**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R281528**		Analysis Date: **12/09/2014**		Seq No: **5959384**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.050	0.0100	7.000		101	90	110				

Sample ID: **1412254-001CDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **281528**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R281528**		Analysis Date: **12/09/2014**		Seq No: **5959443**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.240	0.0100						7.260	0.276	20	H

Sample ID: **1412634-001FDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **281528**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R281528**		Analysis Date: **12/09/2014**		Seq No: **5959444**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.100	0.0100						7.120	0.281	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 13, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1502417

Analytical Environmental Services, Inc. received 3 samples on February 5, 2015 2:50 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1502417

Date: 2-5-15 Page 1 of 1

COMPANY: ERM	ADDRESS: 3200 Windy Hill Rd Ste 1500W Atlanta, GA 30339
PHONE:	FAX:
SAMPLED BY: Don Downing / James Mullooly	SIGNATURE: Donald Downing

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	BTEX 624-5mL WW	150.1 - pH	6010B - Ba	6010B - Sb, Cr, Cu, Hg	Hexavalent Chromium	No # of Containers	REMARKS
	PRESERVATION (See codes)												
1	TB-01-20150205-01	2-5-15	—	X		W	X					2	
2	Effluent Grab	↓	1100	X		GW	X	X	X			4	
3	Effluent Composite	↓	1100		X	GW				X	X	2	
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Donald Downing	2/5/15 1450	1: Cataya Reeves	2/5/15 2:50p
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: AGLC Augusta Effluent

PROJECT #: 02809.10 ph046

SITE ADDRESS: Augusta, GA

SEND REPORT TO: Greg J. Rak

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 8

Turnaround Time Request

- ✓ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS: Hexcr short hold

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 13-Feb-15

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1502417

Case Narrative

pH Analysis by Method SM4500 H+ B:

Sample for pH analysis by Method SM4500 H+ B was received and analyzed outside holding time requirement of "immediate or 15 minutes".

Analytical Environmental Services, Inc **Date:** 13-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01-20150205-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	2/5/2015
Lab ID:	1502417-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
Ethylbenzene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
m,p-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
o-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
Toluene	BRL	5.0		ug/L	202819	1	02/06/2015 17:45	AR
Surr: 4-Bromofluorobenzene	80.1	70.6-123		%REC	202819	1	02/06/2015 17:45	AR
Surr: Dibromofluoromethane	111	78.7-124		%REC	202819	1	02/06/2015 17:45	AR
Surr: Toluene-d8	89	81.3-120		%REC	202819	1	02/06/2015 17:45	AR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	2/5/2015 11:00:00 AM
Lab ID:	1502417-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.0805	0.0100		mg/L	202785	1	02/10/2015 20:08	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
Ethylbenzene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
m,p-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
o-Xylene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
Toluene	BRL	5.0		ug/L	202819	1	02/06/2015 18:15	AR
Surr: 4-Bromofluorobenzene	80.5	70.6-123		%REC	202819	1	02/06/2015 18:15	AR
Surr: Dibromofluoromethane	105	78.7-124		%REC	202819	1	02/06/2015 18:15	AR
Surr: Toluene-d8	86.8	81.3-120		%REC	202819	1	02/06/2015 18:15	AR
Hydrogen Ion (pH) by SM4500 H+ B								
pH	9.46	0.0100	H	pH Units	R285596	1	02/11/2015 10:30	SG

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Feb-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	2/5/2015 11:00:00 AM
Lab ID:	1502417-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	202785	1	02/10/2015 04:44	JL
Chromium	BRL	0.0100		mg/L	202785	1	02/10/2015 04:44	JL
Copper	BRL	0.0250		mg/L	202785	1	02/10/2015 04:44	JL
Nickel	BRL	0.0200		mg/L	202785	1	02/10/2015 04:44	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R285381	1	02/06/2015 08:45	AB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM-SE Work Order Number 1502417

Checklist completed by Ioana Paeurar 2/5/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1502417

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1502417-001A	TB-01-20150205-01	2/5/2015 12:00:00AM	Aqueous	PP-VOLATILES		2/6/2015 11:47:00AM	02/06/2015
1502417-002A	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	PP-VOLATILES		2/10/2015 11:30:00AM	02/10/2015
1502417-002A	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	PP-VOLATILES		2/6/2015 11:47:00AM	02/06/2015
1502417-002B	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			02/11/2015
1502417-002C	EFFLUENT GRAB	2/5/2015 11:00:00AM	Groundwater	Total Metals by ICP		2/6/2015 1:00:00PM	02/10/2015
1502417-003A	EFFLUENT COMPOSITE	2/5/2015 11:00:00AM	Groundwater	Total Metals by ICP		2/6/2015 1:00:00PM	02/10/2015
1502417-003B	EFFLUENT COMPOSITE	2/5/2015 11:00:00AM	Groundwater	Hexavalent Chromium			02/06/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202785

Sample ID: **MB-202785** Client ID: Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055706**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-202785** Client ID: Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055707**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.021	0.0600	1.000		102	85	115				
Barium	1.031	0.0100	1.000		103	85	115				
Chromium	1.042	0.0100	1.000		104	85	115				
Copper	1.032	0.0250	1.000		103	85	115				
Nickel	1.030	0.0200	1.000		103	85	115				

Sample ID: **1502218-001AMS** Client ID: Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055709**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.021	0.0600	1.000		102	70	130				
Barium	1.037	0.0100	1.000	0.01338	102	70	130				
Chromium	1.032	0.0100	1.000	0.0005022	103	70	130				
Copper	1.023	0.0250	1.000		102	70	130				
Nickel	1.005	0.0200	1.000		101	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202785

Sample ID: **1502329-001AMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055714**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.024	0.0600	1.000		102	70	130				
Barium	1.072	0.0100	1.000	0.04590	103	70	130				
Chromium	1.040	0.0100	1.000	0.0009122	104	70	130				
Copper	1.023	0.0250	1.000		102	70	130				
Nickel	1.018	0.0200	1.000		102	70	130				

Sample ID: **1502218-001AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **02/06/2015** Run No: **285440**
BatchID: **202785** Analysis Date: **02/09/2015** Seq No: **6055710**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.026	0.0600	1.000		103	70	130	1.021	0.411	20	
Barium	1.038	0.0100	1.000	0.01338	102	70	130	1.037	0.098	20	
Chromium	1.031	0.0100	1.000	0.0005022	103	70	130	1.032	0.066	20	
Copper	1.025	0.0250	1.000		102	70	130	1.023	0.196	20	
Nickel	1.009	0.0200	1.000		101	70	130	1.005	0.349	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202819

Sample ID: **MB-202819** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285280**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/06/2015** Seq No: **6054298**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	40.22	0	50.00		80.4	70.6	123				
Surr: Dibromofluoromethane	51.86	0	50.00		104	78.7	124				
Surr: Toluene-d8	44.98	0	50.00		90.0	81.3	120				

Sample ID: **LCS-202819** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285280**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/06/2015** Seq No: **6054297**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.00	5.0	20.00		90.0	64	136				
Ethylbenzene	16.39	5.0	20.00		82.0	59	141				
m,p-Xylene	31.89	5.0	40.00		79.7	69.5	123				
o-Xylene	17.05	5.0	20.00		85.2	67.9	119				
Toluene	17.03	5.0	20.00		85.2	75	126				
Surr: 4-Bromofluorobenzene	48.42	0	50.00		96.8	70.6	123				
Surr: Dibromofluoromethane	53.14	0	50.00		106	78.7	124				
Surr: Toluene-d8	49.37	0	50.00		98.7	81.3	120				

Sample ID: **1502314-001AMS** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285670**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/12/2015** Seq No: **6061618**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	20.84	5.0	20.00		104	37	151				
Ethylbenzene	17.75	5.0	20.00		88.8	37	162				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: 202819

Sample ID: **1502314-001AMS** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285670**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/12/2015** Seq No: **6061618**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	BRL	5.0	40.00		12.4	71.5	145				S
o-Xylene	6.520	5.0	20.00		32.6	72	140				S
Toluene	16.38	5.0	20.00		81.9	47	150				
Surr: 4-Bromofluorobenzene	50.32	0	50.00		101	70.6	123				
Surr: Dibromofluoromethane	51.73	0	50.00		103	78.7	124				
Surr: Toluene-d8	49.63	0	50.00		99.3	81.3	120				

Sample ID: **1502314-001AMSD** Client ID: Units: **ug/L** Prep Date: **02/06/2015** Run No: **285670**
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **202819** Analysis Date: **02/12/2015** Seq No: **6061619**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	20.09	5.0	20.00		100	37	151	20.84	3.66	19.4	
Ethylbenzene	17.23	5.0	20.00		86.2	37	162	17.75	2.97	19.1	
m,p-Xylene	BRL	5.0	40.00		11.4	71.5	145	4.940	0	20.4	S
o-Xylene	6.180	5.0	20.00		30.9	72	140	6.520	5.35	18.8	S
Toluene	16.20	5.0	20.00		81.0	47	150	16.38	1.10	19.7	
Surr: 4-Bromofluorobenzene	50.55	0	50.00		101	70.6	123	50.32	0	0	
Surr: Dibromofluoromethane	52.41	0	50.00		105	78.7	124	51.73	0	0	
Surr: Toluene-d8	50.16	0	50.00		100	81.3	120	49.63	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: R285381

Sample ID: **MB-R285381**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054253**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R285381**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054254**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4912	0.010	0.5000		98.2	90	110				

Sample ID: **1502417-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4623	0.010	0.5000		92.5	85	115				

Sample ID: **1502417-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **285381**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R285381**	Analysis Date: **02/06/2015**	Seq No: **6054259**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4785	0.010	0.5000		95.7	85	115	0.4623	3.44	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1502417

ANALYTICAL QC SUMMARY REPORT

BatchID: R285596

Sample ID: **LCS-R285596**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **285596**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R285596**		Analysis Date: **02/11/2015**		Seq No: **6059658**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.010	0.0100	7.000		100	90	110				

Sample ID: **1502349-001ADUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **285596**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R285596**		Analysis Date: **02/11/2015**		Seq No: **6059660**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.800	0.0100						7.830	0.384	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 17, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGLC Augusta Effluent

Dear Greg Jirak: Order No: 1503488

Analytical Environmental Services, Inc. received 3 samples on 3/6/2015 10:44:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1503488

Date: 3/6/15 Page 1 of 1

COMPANY:	ADDRESS:
ERM	3200 Windy Hill Rd SE Ste 1500W Atlanta, GA 30339
PHONE: 678-486-2700	FAX:
SAMPLED BY: U. Virgo / B. Mitchell	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	ANALYSIS REQUESTED: BTEX	pH	6010B-Ba	6010B-Sb, Cr, Cu, Ni	Hex Chrom	Bis 2-ethyl	PRESERVATION (See codes)	REMARKS	No # of Containers
1	TB-01-20150306-01	3/6/15	—			W	X								2
2	Effluent Grab	↓	0830	X		GW	X	X	X			X			6
3	Effluent Composite	↓	0830		X	GW				X	X				2
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Will Virgo	3/6 1644	1: Latoya Reeves	3/6/15 10:44a
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: AGLC Augusta Effluent
PROJECT #: 0280910 PH 046
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg Sirak
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 10

Turnaround Time Request
- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:
Hex Cr shorthold

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGLC Augusta Effluent
Lab ID: 1503488

Case Narrative

Method 6010B was listed on the Chain of Custody for metals analysis. Samples were analyzed by method 200.7 per history.

pH Analysis by Method SM4500 H+ B:

Sample for pH analysis by Method SM4500 H+ B was received and analyzed outside of the holding time requirement of "immediate or 15 minutes".

Analytical Environmental Services, Inc **Date:** 16-Mar-15

Client:	ERM-Southeast	**Client Sample ID:**	TB-01-20150306-01
Project Name:	AGLC Augusta Effluent	**Collection Date:**	3/6/2015
Lab ID:	1503488-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
Ethylbenzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
m,p-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
o-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
Toluene	BRL	5.0		ug/L	204375	1	03/13/2015 13:16	AR
Surr: 4-Bromofluorobenzene	93.4	70.6-123		%REC	204375	1	03/13/2015 13:16	AR
Surr: Dibromofluoromethane	80	78.7-124		%REC	204375	1	03/13/2015 13:16	AR
Surr: Toluene-d8	82.8	81.3-120		%REC	204375	1	03/13/2015 13:16	AR

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 16-Mar-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGLC Augusta Effluent	**Collection Date:**	3/6/2015 8:30:00 AM
Lab ID:	1503488-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.811	0.0100		mg/L	204231	1	03/11/2015 03:13	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
Ethylbenzene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
m,p-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
o-Xylene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
Toluene	BRL	5.0		ug/L	204375	1	03/13/2015 13:40	AR
Surr: 4-Bromofluorobenzene	90.1	70.6-123		%REC	204375	1	03/13/2015 13:40	AR
Surr: Dibromofluoromethane	81.6	78.7-124		%REC	204375	1	03/13/2015 13:40	AR
Surr: Toluene-d8	87.5	81.3-120		%REC	204375	1	03/13/2015 13:40	AR
PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625				**(E625)**				
Bis(2-ethylhexyl)phthalate	BRL	10		ug/L	204210	1	03/11/2015 09:39	YH
Surr: 2,4,6-Tribromophenol	89.1	52-133		%REC	204210	1	03/11/2015 09:39	YH
Surr: 2-Fluorobiphenyl	72.9	50-121		%REC	204210	1	03/11/2015 09:39	YH
Surr: 2-Fluorophenol	42	27.5-120		%REC	204210	1	03/11/2015 09:39	YH
Surr: 4-Terphenyl-d14	74.1	46.3-137		%REC	204210	1	03/11/2015 09:39	YH
Surr: Nitrobenzene-d5	67.6	41.2-121		%REC	204210	1	03/11/2015 09:39	YH
Surr: Phenol-d5	30.7	14.3-120		%REC	204210	1	03/11/2015 09:39	YH
Hydrogen Ion (pH) by SM4500 H+ B								
pH	7.23	0.0100	H	pH Units	R287428	1	03/12/2015 10:16	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 16-Mar-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGLC Augusta Effluent	**Collection Date:**	3/6/2015 8:30:00 AM
Lab ID:	1503488-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	204231	1	03/11/2015 22:38	JL
Chromium	BRL	0.0100		mg/L	204231	1	03/11/2015 22:38	JL
Copper	BRL	0.0250		mg/L	204231	1	03/11/2015 22:38	JL
Nickel	BRL	0.0200		mg/L	204231	1	03/11/2015 22:38	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R287118	1	03/06/2015 11:40	AB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1503488

Checklist completed by [signature] 3/6/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client / US Mail __ Other _____

Shipping container/cooler in good condition? Yes / No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present /

Custody seals intact on sample bottles? Yes __ No __ Not Present /

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes / No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes / No __

Chain of custody signed when relinquished and received? Yes / No __

Chain of custody agrees with sample labels? Yes / No __

Samples in proper container/bottle? Yes / No __

Sample containers intact? Yes / No __

Sufficient sample volume for indicated test? Yes / No __

All samples received within holding time? Yes X JB 3/6/15 No __

Was TAT marked on the COC? Yes / No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable /

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes / No __

Water - pH acceptable upon receipt? Yes / No __ Not Applicable __

Adjusted? _____ Checked by JB

Sample Condition: Good / Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No /

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Lab Order: 1503488

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1503488-001A	TB-01-20150306-01	3/6/2015 12:00:00AM	Aqueous	PP-VOLATILES		3/11/2015 10:09:00PM	03/13/2015
1503488-002A	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	PP-VOLATILES		3/11/2015 10:09:00PM	03/13/2015
1503488-002B	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	Total Metals by ICP		3/10/2015 11:40:00AM	03/11/2015
1503488-002C	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			03/12/2015
1503488-002D	EFFLUENT GRAB	3/6/2015 8:30:00AM	Groundwater	PP-SEMIVOLATILE ORGANICS		3/10/2015 8:00:00AM	03/11/2015
1503488-003A	EFFLUENT COMPOSITE	3/6/2015 8:30:00AM	Groundwater	Total Metals by ICP		3/11/2015 9:00:00AM	03/11/2015
1503488-003B	EFFLUENT COMPOSITE	3/6/2015 8:30:00AM	Groundwater	Hexavalent Chromium			03/06/2015

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204210

Sample ID: **MB-204210** Client ID: Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101284**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	BRL	5.0									
Surr: 2,4,6-Tribromophenol	52.66	0	50.00		105	52	133				
Surr: 2-Fluorobiphenyl	20.89	0	25.00		83.6	50	121				
Surr: 2-Fluorophenol	24.08	0	50.00		48.2	27.5	120				
Surr: 4-Terphenyl-d14	22.06	0	25.00		88.2	46.3	137				
Surr: Nitrobenzene-d5	19.17	0	25.00		76.7	41.2	121				
Surr: Phenol-d5	15.90	0	50.00		31.8	14.3	120				

Sample ID: **LCS-204210** Client ID: Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101988**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	48.27	5.0	50.00		96.5	28.9	136.88				
Surr: 2,4,6-Tribromophenol	56.20	0	50.00		112	52	133				
Surr: 2-Fluorobiphenyl	22.27	0	25.00		89.1	50	121				
Surr: 2-Fluorophenol	22.28	0	50.00		44.6	27.5	120				
Surr: 4-Terphenyl-d14	23.48	0	25.00		93.9	46.3	137				
Surr: Nitrobenzene-d5	21.91	0	25.00		87.6	41.2	121				
Surr: Phenol-d5	15.34	0	50.00		30.7	14.3	120				

Sample ID: **1503595-004AMS** Client ID: Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625** BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101950**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	94.00	50	100.0	9.750	84.2	8	158				
Surr: 2,4,6-Tribromophenol	94.85	0	100.0		94.8	52	133				
Surr: 2-Fluorobiphenyl	39.85	0	50.00		79.7	50	121				
Surr: 2-Fluorophenol	51.05	0	100.0		51.0	27.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204210

Sample ID: **1503595-004AMS** Client ID:
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625**
Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101950**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Terphenyl-d14	39.10	0	50.00		78.2	46.3	137				
Surr: Nitrobenzene-d5	36.55	0	50.00		73.1	41.2	121				
Surr: Phenol-d5	41.75	0	100.0		41.8	14.3	120				

Sample ID: **1503595-004AMSD** Client ID:
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-SEMIVOLATILE ORGANICS E625**
Units: **ug/L** Prep Date: **03/10/2015** Run No: **287301**
BatchID: **204210** Analysis Date: **03/10/2015** Seq No: **6101951**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	87.85	50	100.0	9.750	78.1	8	158	94.00	6.76	41.1	
Surr: 2,4,6-Tribromophenol	89.55	0	100.0		89.6	52	133	94.85	0	0	
Surr: 2-Fluorobiphenyl	38.25	0	50.00		76.5	50	121	39.85	0	0	
Surr: 2-Fluorophenol	53.95	0	100.0		54.0	27.5	120	51.05	0	0	
Surr: 4-Terphenyl-d14	36.75	0	50.00		73.5	46.3	137	39.10	0	0	
Surr: Nitrobenzene-d5	38.70	0	50.00		77.4	41.2	121	36.55	0	0	
Surr: Phenol-d5	43.10	0	100.0		43.1	14.3	120	41.75	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204231

Sample ID: **MB-204231** Client ID: Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102877**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-204231** Client ID: Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102878**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.033	0.0600	1.000	0.002693	103	85	115				
Barium	1.041	0.0100	1.000		104	85	115				
Chromium	1.071	0.0100	1.000		107	85	115				
Copper	1.029	0.0250	1.000		103	85	115				
Nickel	1.032	0.0200	1.000		103	85	115				

Sample ID: **1503488-002BMS** Client ID: **EFFLUENT GRAB** Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102887**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.036	0.0600	1.000		104	70	130				
Barium	1.809	0.0100	1.000	0.8115	99.7	70	130				
Chromium	1.064	0.0100	1.000	0.0007551	106	70	130				
Copper	1.021	0.0250	1.000		102	70	130				
Nickel	0.9851	0.0200	1.000		98.5	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204231

Sample ID: **1503729-002AMS** Client ID:
SampleType: **MS** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102880**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9912	0.0600	1.000		99.1	70	130				
Barium	0.9703	0.0100	1.000	0.02701	94.3	70	130				
Chromium	1.012	0.0100	1.000	0.01505	99.7	70	130				
Copper	0.9906	0.0250	1.000	0.03814	95.2	70	130				
Nickel	0.9274	0.0200	1.000		92.7	70	130				

Sample ID: **1503729-002AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7**
Units: **mg/L** Prep Date: **03/10/2015** Run No: **287332**
BatchID: **204231** Analysis Date: **03/11/2015** Seq No: **6102881**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	0.9909	0.0600	1.000		99.1	70	130	0.9912	0.029	20	
Barium	0.9804	0.0100	1.000	0.02701	95.3	70	130	0.9703	1.03	20	
Chromium	1.022	0.0100	1.000	0.01505	101	70	130	1.012	0.987	20	
Copper	0.9989	0.0250	1.000	0.03814	96.1	70	130	0.9906	0.842	20	
Nickel	0.9356	0.0200	1.000		93.6	70	130	0.9274	0.879	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204375

Sample ID: **MB-204375** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106863**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	44.39	0	50.00		88.8	70.6	123				
Surr: Dibromofluoromethane	43.96	0	50.00		87.9	78.7	124				
Surr: Toluene-d8	42.74	0	50.00		85.5	81.3	120				

Sample ID: **LCS-204375** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106865**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	19.16	5.0	20.00		95.8	64	136				
Ethylbenzene	19.30	5.0	20.00		96.5	59	141				
m,p-Xylene	43.26	5.0	40.00		108	69.5	123				
o-Xylene	19.48	5.0	20.00		97.4	67.9	119				
Toluene	19.51	5.0	20.00		97.6	75	126				
Surr: 4-Bromofluorobenzene	49.11	0	50.00		98.2	70.6	123				
Surr: Dibromofluoromethane	44.37	0	50.00		88.7	78.7	124				
Surr: Toluene-d8	47.81	0	50.00		95.6	81.3	120				

Sample ID: **1503A17-001AMS** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106866**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	2110	500	2000		106	37	151				
Ethylbenzene	2149	500	2000		107	37	162				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: 204375

Sample ID: **1503A17-001AMS** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106866**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	9045	500	4000	4310	118	71.5	145				
o-Xylene	2122	500	2000		106	72	140				
Toluene	2151	500	2000		108	47	150				
Surr: 4-Bromofluorobenzene	4792	0	5000		95.8	70.6	123				
Surr: Dibromofluoromethane	4367	0	5000		87.3	78.7	124				
Surr: Toluene-d8	4730	0	5000		94.6	81.3	120				

Sample ID: **1503A17-001AMSD** Client ID: Units: **ug/L** Prep Date: **03/11/2015** Run No: **287403**
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **204375** Analysis Date: **03/12/2015** Seq No: **6106867**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	2023	500	2000		101	37	151	2110	4.21	19.4	
Ethylbenzene	2085	500	2000		104	37	162	2149	3.02	19.1	
m,p-Xylene	8503	500	4000	4310	105	71.5	145	9045	6.18	20.4	
o-Xylene	2027	500	2000		101	72	140	2122	4.58	18.8	
Toluene	2057	500	2000		103	47	150	2151	4.47	19.7	
Surr: 4-Bromofluorobenzene	4760	0	5000		95.2	70.6	123	4792	0	0	
Surr: Dibromofluoromethane	4405	0	5000		88.1	78.7	124	4367	0	0	
Surr: Toluene-d8	4723	0	5000		94.5	81.3	120	4730	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: R287118

Sample ID: **MB-R287118**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096471**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R287118**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096472**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4807	0.010	0.5000		96.1	90	110				

Sample ID: **1503488-003BMS**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4839	0.010	0.5000		96.8	85	115				

Sample ID: **1503488-003BMSD**	Client ID: **EFFLUENT COMPOSITE**			Units: **mg/L**	Prep Date:	Run No: **287118**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R287118**	Analysis Date: **03/06/2015**	Seq No: **6096549**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4765	0.010	0.5000		95.3	85	115	0.4839	1.54	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGLC Augusta Effluent
Workorder: 1503488

ANALYTICAL QC SUMMARY REPORT

BatchID: R287428

Sample ID: **LCS-R287428**	Client ID:			Units: **pH Units**	Prep Date:	Run No: **287428**
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**			BatchID: **R287428**	Analysis Date: **03/12/2015**	Seq No: **6105104**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.000	0.0100	7.000		100	90	110				

Sample ID: **1503803-001BDUP**	Client ID:			Units: **pH Units**	Prep Date:	Run No: **287428**
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**			BatchID: **R287428**	Analysis Date: **03/12/2015**	Seq No: **6105119**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	6.800	0.0100						6.700	1.48	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

April 13, 2015

Greg Jirak
ERM-Southeast
3200 Windy Hill Rd
Atlanta GA 30339

TEL: (678) 486-2700
FAX: (404) 745-0103

RE: AGL Augusta

Dear Greg Jirak: Order No: 1504239

Analytical Environmental Services, Inc. received 3 samples on 4/3/2015 10:35:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1504239

Date: 4/3/2015 Page 1 of 1

COMPANY: ERM

ADDRESS: 3200 Windy Hill Rd SE Ste 1500W Atlanta, GA 30339

PHONE: (678) 486-2700

FAX:

SAMPLED BY: V. Virgo / B. Mitchell

SIGNATURE:

ANALYSIS REQUESTED

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	PH	BTEX	Total Metals	Hex Chrom	REMARKS	No # of Containers
1	Effluent Grab	4/3/15	0730	X		GW	1 2						3
2	Effluent Composite		0730		X	GW				1	1		2
3	Trip Blank		—			W							1
4	Temp Blank		—			W							1
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY / DATE/TIME
1: Bill Mitchell 4-3-15 10:35

RECEIVED BY / DATE/TIME
1: Latoya Reeves 4/3/15 10:35
2:
3:

PROJECT INFORMATION
PROJECT NAME: AGL Augusta
PROJECT #:
SITE ADDRESS: Augusta, GA
SEND REPORT TO: Greg.Sirak@ERM.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 7

Turnaround Time Request
- ⊘ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: ERM-Southeast
Project: AGL Augusta
Lab ID: 1504239

Case Narrative

Sample Receiving Nonconformance:

Sample for pH analysis by Method SM4500 H+ B was received and analyzed outside of the method specified holding time of immediate or 15 minutes.

Sample for Barium analysis was not received and was not listed on the Chain of Custody (COC) for sample "Effluent Grab"; however, Barium is usually reported per project history. Per Greg Jirak 4/3/2015, sample needed for Barium analysis was split and preserved from the unpreserved sample that was received for pH analysis. Chemical preservatives were added to meet method specified pH requirements for the requested test methods.

Analytical Environmental Services, Inc **Date:** 13-Apr-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT GRAB
Project Name:	AGL Augusta	**Collection Date:**	4/3/2015 7:30:00 AM
Lab ID:	1504239-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Barium	0.755	0.0100		mg/L	205531	1	04/07/2015 22:41	JL
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
Ethylbenzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
m,p-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
o-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
Toluene	BRL	5.0		ug/L	205622	1	04/06/2015 20:56	MD
Surr: 4-Bromofluorobenzene	101	70.6-123		%REC	205622	1	04/06/2015 20:56	MD
Surr: Dibromofluoromethane	100	78.7-124		%REC	205622	1	04/06/2015 20:56	MD
Surr: Toluene-d8	95.7	81.3-120		%REC	205622	1	04/06/2015 20:56	MD
Hydrogen Ion (pH) by SM4500 H+ B								
pH	7.07	0.0100	H	pH Units	R289312	1	04/07/2015 09:15	JS

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-15

Client:	ERM-Southeast	**Client Sample ID:**	EFFLUENT COMPOSITE
Project Name:	AGL Augusta	**Collection Date:**	4/3/2015 7:30:00 AM
Lab ID:	1504239-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP E200.7				**(E200.7)**				
Antimony	BRL	0.0600		mg/L	205531	1	04/07/2015 22:51	JL
Chromium	BRL	0.0100		mg/L	205531	1	04/07/2015 22:51	JL
Copper	BRL	0.0250		mg/L	205531	1	04/07/2015 22:51	JL
Nickel	BRL	0.0200		mg/L	205531	1	04/07/2015 22:51	JL
Hexavalent Chromium SM3500-Cr B								
Chromium, Hexavalent	BRL	0.010		mg/L	R289242	1	04/03/2015 12:10	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Apr-15

Client:	ERM-Southeast	**Client Sample ID:**	TRIP BLANK
Project Name:	AGL Augusta	**Collection Date:**	4/3/2015
Lab ID:	1504239-003	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PRIORITY POLLUTANT-VOLATILES E624				**(E624)**				
Benzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
Ethylbenzene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
m,p-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
o-Xylene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
Toluene	BRL	5.0		ug/L	205622	1	04/06/2015 20:30	MD
Surr: 4-Bromofluorobenzene	102	70.6-123		%REC	205622	1	04/06/2015 20:30	MD
Surr: Dibromofluoromethane	100	78.7-124		%REC	205622	1	04/06/2015 20:30	MD
Surr: Toluene-d8	94.8	81.3-120		%REC	205622	1	04/06/2015 20:30	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client ERM Work Order Number 1504239

Checklist completed by Tanya Delis 4/3/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.0 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes __ No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ 4 mls vials No ✓ Not Applicable __

Adjusted? MJ Checked by Tanya

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: ERM-Southeast
Project Name: AGL Augusta
Lab Order: 1504239

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1504239-001A	EFFLUENT GRAB	4/3/2015 7:30:00AM	Groundwater	PP-VOLATILES		4/6/2015 11:55:00AM	04/06/2015
1504239-001B	EFFLUENT GRAB	4/3/2015 7:30:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			04/07/2015
1504239-001C	EFFLUENT GRAB	4/3/2015 7:30:00AM	Groundwater	Total Metals by ICP		4/4/2015 9:45:00AM	04/07/2015
1504239-002A	EFFLUENT COMPOSITE	4/3/2015 7:30:00AM	Groundwater	Total Metals by ICP		4/4/2015 9:45:00AM	04/07/2015
1504239-002B	EFFLUENT COMPOSITE	4/3/2015 7:30:00AM	Groundwater	Hexavalent Chromium			04/03/2015
1504239-003A	TRIP BLANK	4/3/2015 12:00:00AM	Aqueous	PP-VOLATILES		4/6/2015 11:55:00AM	04/06/2015

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1504239-001C	Metal	6	<2	HNO3	600-78	.25 mL Pellets	1	MS	4/3/15	16:50
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
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						mL Pellets				

* Number of Pellets when adding NAOH

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205531

Sample ID: **MB-205531** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MBLK** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151384**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	0.0600									
Barium	BRL	0.0100									
Chromium	BRL	0.0100									
Copper	BRL	0.0250									
Nickel	BRL	0.0200									

Sample ID: **LCS-205531** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **LCS** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151385**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.063	0.0600	1.000		106	85	115				
Barium	1.055	0.0100	1.000		106	85	115				
Chromium	1.106	0.0100	1.000		111	85	115				
Copper	1.041	0.0250	1.000		104	85	115				
Nickel	1.046	0.0200	1.000		105	85	115				

Sample ID: **1504119-001BMS** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151387**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.075	0.0600	1.000		108	70	130				
Barium	1.086	0.0100	1.000	0.03335	105	70	130				
Chromium	1.109	0.0100	1.000	0.002344	111	70	130				
Copper	1.060	0.0250	1.000	0.003096	106	70	130				
Nickel	1.029	0.0200	1.000	0.003300	103	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205531

Sample ID: **1504196-001AMS** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MS** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151392**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.057	0.0600	1.000		106	70	130				
Barium	1.052	0.0100	1.000	0.01148	104	70	130				
Chromium	1.094	0.0100	1.000		109	70	130				
Copper	1.034	0.0250	1.000		103	70	130				
Nickel	1.034	0.0200	1.000		103	70	130				

Sample ID: **1504119-001BMSD** Client ID: Units: **mg/L** Prep Date: **04/04/2015** Run No: **289380**
SampleType: **MSD** TestCode: **Total Metals by ICP E200.7** BatchID: **205531** Analysis Date: **04/07/2015** Seq No: **6151388**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	1.067	0.0600	1.000		107	70	130	1.075	0.765	20	
Barium	1.074	0.0100	1.000	0.03335	104	70	130	1.086	1.11	20	
Chromium	1.096	0.0100	1.000	0.002344	109	70	130	1.109	1.23	20	
Copper	1.045	0.0250	1.000	0.003096	104	70	130	1.060	1.43	20	
Nickel	1.017	0.0200	1.000	0.003300	101	70	130	1.029	1.21	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205622

Sample ID: **MB-205622** Client ID: Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
SampleType: **MBLK** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149205**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	5.0									
Ethylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
o-Xylene	BRL	5.0									
Toluene	BRL	5.0									
Surr: 4-Bromofluorobenzene	49.99	0	50.00		100.0	70.6	123				
Surr: Dibromofluoromethane	47.88	0	50.00		95.8	78.7	124				
Surr: Toluene-d8	47.35	0	50.00		94.7	81.3	120				

Sample ID: **LCS-205622** Client ID: Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
SampleType: **LCS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149209**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	19.67	5.00	20.00		98.4	64	136				
Ethylbenzene	21.00	5.00	20.00		105	59	141				
m,p-Xylene	40.55	5.0	40.00		101	69.5	123				
o-Xylene	20.41	5.0	20.00		102	67.9	119				
Toluene	20.61	5.0	20.00		103	75	126				
Surr: 4-Bromofluorobenzene	55.91	0	50.00		112	70.6	123				
Surr: Dibromofluoromethane	49.14	0	50.00		98.3	78.7	124				
Surr: Toluene-d8	49.24	0	50.00		98.5	81.3	120				

Sample ID: **1504277-003AMS** Client ID: Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624** BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149207**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	956.5	250	1000		95.6	37	151				
Ethylbenzene	1072	250	1000		107	37	162				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: 205622

Sample ID: **1504277-003AMS** Client ID:
SampleType: **MS** TestCode: **PRIORITY POLLUTANT-VOLATILES E624**
Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149207**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Xylene	2048	250	2000		102	71.5	145				
o-Xylene	1016	250	1000		102	72	140				
Toluene	964.0	250	1000		96.4	47	150				
Surr: 4-Bromofluorobenzene	2752	0	2500		110	70.6	123				
Surr: Dibromofluoromethane	2400	0	2500		96.0	78.7	124				
Surr: Toluene-d8	2452	0	2500		98.1	81.3	120				

Sample ID: **1504277-003AMSD** Client ID:
SampleType: **MSD** TestCode: **PRIORITY POLLUTANT-VOLATILES E624**
Units: **ug/L** Prep Date: **04/06/2015** Run No: **289213**
BatchID: **205622** Analysis Date: **04/06/2015** Seq No: **6149208**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	937.0	250	1000		93.7	37	151	956.5	2.06	19.4	
Ethylbenzene	1032	250	1000		103	37	162	1072	3.80	19.1	
m,p-Xylene	2004	250	2000		100	71.5	145	2048	2.15	20.4	
o-Xylene	993.5	250	1000		99.4	72	140	1016	2.24	18.8	
Toluene	948.5	250	1000		94.8	47	150	964.0	1.62	19.7	
Surr: 4-Bromofluorobenzene	2802	0	2500		112	70.6	123	2752	0	0	
Surr: Dibromofluoromethane	2419	0	2500		96.8	78.7	124	2400	0	0	
Surr: Toluene-d8	2416	0	2500		96.7	81.3	120	2452	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: R289242

Sample ID: **MB-R289242**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **MBLK**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147435**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.010									

Sample ID: **LCS-R289242**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **LCS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147436**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4743	0.010	0.5000		94.9	90	110				

Sample ID: **1504165-001EMS**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **MS**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147450**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.3962	0.010	0.5000		79.2	85	115				S

Sample ID: **1504165-001EMSD**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **289242**
SampleType: **MSD**	TestCode: **Hexavalent Chromium**	**SM3500-Cr B**		BatchID: **R289242**	Analysis Date: **04/02/2015**	Seq No: **6147464**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.3952	0.010	0.5000		79.0	85	115	0.3962	0.253	30	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: ERM-Southeast
Project Name: AGL Augusta
Workorder: 1504239

ANALYTICAL QC SUMMARY REPORT

BatchID: R289312

Sample ID: **LCS-R289312**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **289312**	
SampleType: **LCS**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R289312**		Analysis Date: **04/07/2015**		Seq No: **6149413**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.040	0.0100	7.000		101	90	110				

Sample ID: **1504032-001ADUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **289312**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R289312**		Analysis Date: **04/07/2015**		Seq No: **6149428**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	7.090	0.0100						7.100	0.141	20	H

Sample ID: **1504344-001CDUP**	Client ID:				Units: **pH Units**		Prep Date:		Run No: **289312**	
SampleType: **DUP**	TestCode: **Hydrogen Ion (pH) by SM4500 H+ B**				BatchID: **R289312**		Analysis Date: **04/07/2015**		Seq No: **6149431**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
pH	5.790	0.0100						5.780	0.173	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Seepage Velocity Calculations

Appendix C

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix C
Seepage Velocity Calculations
Atlanta Gas Light Company
Former Manufactured Gas Plant Site

Hydrogeologic Unit	Hydraulic Conductivity (cm/sec)	Porosity (unitless)	January 12, 2015		Monitoring wells used for gradient calculations
			Gradient	Velocity (ft/day)	
Alluvium	1.170E-03	3.90E-01	1.46E-02	1.2E-01	MW-17 & 124 contour
Galliard	1.500E-04	4.50E-01	1.05E-02	9.9E-03	MW-207; MW-602; MW-309D
Galliard	1.500E-04	4.50E-01	2.50E-03	2.4E-03	MW-21; MW-25; MW-203
Galliard	1.500E-04	4.50E-01	8.20E-03	7.7E-03	MW-19; MW-205; MW-206
Saprolite	8.980E-06	5.30E-01	1.80E-03	8.6E-05	MW-214; MW-306SAP; MW-310SAP
Bedrock*	9.348E-04	1.42E-02	3.28E-03	6.1E-01	MW-318; MW-325; MW-513BR
Bedrock*	9.348E-04	1.42E-02	1.47E-03	2.7E-01	MW-313; MW-309BR; MW-503BR
Bedrock*	9.348E-04	6.00E-01	3.28E-03	1.4E-02	MW-318; MW-325; MW-513BR
Bedrock*	9.348E-04	6.00E-01	1.47E-03	6.5E-03	MW-313; MW-309BR; MW-503BR

*Bedrock porosity range taken from Applied Hydrogeology 4th Ed., Fetter, 2001
Multiple bedrock and Galliard gradients are presented from different areas of the site.
Porosities used in velocity calcuations are average porosities from RETEC, 2003 Remedial Investigation
Vs=Ki/n
where:
Vs=seepage velocity (velocity)
K=horizontal hydraulic conductivity
i=horizontal hydraulic gradient (gradient)
n=porosity

N

MW-408S
(124.96)

TELFAIR ST

WALKER ST

Gradient Calculation			
Points	Distance	Rise	Gradient
MW-17 & 124 Contour	220	3.22	0.0146

9TH ST

FENWICK ST

8TH ST

7TH ST

KING ST

TAYLOR ST

WALTON WAY

126

125

124

127

MW-501S
(125.60)

MW-306S
(124.58)

MW-402S
(123.27)

NORTHERN
PARCEL

WESTERN
PARCEL

MW-17
(127.22)

MW-401S
(126.70)

MW-05

0 200 Feet

(127.22) Groundwater Elevation (Feet MSL)

Alluvium Monitoring Well

Destroyed Alluvium Monitoring Well

Potentiometric Surface Contour (Feet MSL)

Groundwater Flow Direction

Flow Line Used for Groundwater Gradient Estimation

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306S is in a Depth Discrete Sampling Port (DDSP) well.

*MW-408S was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-1GWElevAlluvium.mxd

FIGURE C-1
GROUNDWATER ELEVATION MAP FOR THE ALLUVIUM JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-408DR*
(124.67)

TELFAIR ST

WALKER ST

9TH ST

MW-603
(124.30)

FENWICK ST

8TH ST

MW-404DR
(125.60)

WALTON WAY

MW-502D
(124.19)

MW-306D
(124.18)

MW-600
(125.21)

$\frac{dh}{dL} = \frac{123.5-122}{600} = 0.00250$

MW-307D
(124.67)

MW-24
(123.74)

MW-21
(121.66)

7TH ST

MW-310D
(124.39)

MW-402D
(124.23)

NORTHERN
PARCEL

122.0

122.5

123.0

MW-211
(NM)

MW-202DR
(124.07)

MW-601
(124.00)

KING ST

123.5

MW-19
(127.71)

127.5

127.0

126.5

126.0

125.5

125.0

124.5

MW-205
(124.02)

MW-203
(123.95)

$\frac{dh}{dL} = \frac{127.5-124.5}{366} = 0.00820$

MW-22
(123.92)

MW-401D
(124.20)

TAYLOR ST

MW-12
(123.88)

MW-25
(123.77)

SOUTHERN
PARCEL

MW-206
(123.94)

126.5

126

125.5

125.0

124.5

124.0

MW-207
(126.65)

MW-309D
(123.51)

MW-505D
(123.68)

MW-304
(123.08)

MW-303
(123.23)

MW-602
(122.70)

$\frac{dh}{dL} = \frac{126.5-124}{239} = 0.0105$

0 200 Feet

(123.10) Groundwater Elevation (Feet MSL)

(NM) Not Measured

Apparent Groundwater Contour (Dashed where inferred)

Apparent Groundwater Flow Direction

Galliard Monitoring Well

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306D, MW-307D, MW-309D and MW-310D are in Depth Discrete Sampling Port (DDSP) wells.

*MW-408DR was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/11/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-2GWElevGalliard.mxd

FIGURE C-2
3-POINT GRADIENT ESTIMATION FOR THE GALLIARD
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

TELFAIR ST

WALKER ST

MW-317
(NM)

9TH ST

FENWICK ST

8TH ST

7TH ST

WALTON WAY

MW-306SAP
(124.21)

MW-307SAP
(123.17)

MW-310SAP
(124.32)

NORTHERN
PARCEL

$$\frac{dh}{dL} = \frac{124\text{-}123}{555} = 0.00180$$

124.0

123.5

KING ST

WESTERN
PARCEL

MW-214
(122.93)

MW-401SAP
(124.33)

123.0

MW-311
(123.65)

TAYLOR ST

SOUTHERN
PARCEL

MW-309SAP
(NM)

(121.25) Groundwater Elevation (Feet MSL)

Saprolite Monitoring Well

Apparent Groundwater Contour
(Dashed where inferred)

Apparent Groundwater Flow Direction

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation)
Area

NOTE:
MW-306SAP, MW-307SAP, MW-309SAP and MW-310SAP are in Depth Discrete Sampling Port (DDSP) wells.

NM = Not measured

0 200
Feet

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/10/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-3GWElevSaprolite.mxd

FIGURE C-3
3-POINT GRADIENT ESTIMATION FOR THE SAPROLITE
JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness
Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

N

MW-319 (124.08)

TELFAIR ST

WALKER ST

MW-320 (123.24)

MW-318 (123.28)

MW-315 (123.97)

9TH ST

MW-513BR (123.54)

123.0

122.5

122.0

121.5

MW-325 (121.29)

$\frac{dh}{dL} = \frac{123\text{-}121.5}{457} = 0.00328$

FENWICK ST

8TH ST

WALTON WAY

MW-306BR (123.77)

MW-306TZ (123.84)

MW-512BR (123.86)

MW-511BR (123.84)

MW-307TZ (NM)

MW-323 (120.35)

MW-324 (120.66)

MW-321 (120.10)

MW-322 (120.63)

MW-316 (120.75)

MW-307BR

MW-503BR (123.90)

MW-504BR (123.89)

7TH ST

MW-310BR* (129.98)

MW-310TZ (NM)

NORTHERN PARCEL

MW-510BR (123.76)

123.5

MW-313 (122.49)

MW-509BR (123.78)

KING ST

WESTERN PARCEL

MW-213 (123.15)

MW-308BR

123.0

TAYLOR ST

MW-500BR (123.82)

SOUTHERN PARCEL

MW-508BR (123.31)

122.5

MW-506BR

$\frac{dh}{dL} = \frac{123.5\text{-}122.5}{681} = 0.00147$

MW-309TZ (NM)

MW-309BR (122.24)

MW-507BR (121.88)

0 200 Feet

(122.49) Groundwater Elevation (Feet MSL)

Bedrock Monitoring Well

Bedrock Recovery Well

Transition Well

Destroyed Bedrock Monitoring Well

Apparent Groundwater Contour (Dashed where inferred)

Apparent Groundwater Flow Direction

Parcels

ISS (In Situ Solidification) Area

ISCO (In Situ Chemical Oxidation) Area

NOTE:
MW-306TZ, MW-309TZ and MW-310TZ are in Depth Discrete Sampling Port (DDSP) wells.

NM = Not measured

Dashed where inferred

* MW-310BR is an anomalous point and was not used for contouring.

Basemap Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS

Environmental Resources Management

DESIGN:	S. VIZUETE	DRAWN:	S. VIZUETE	CHKD.:	N. VREY
DATE:	5/11/2015	SCALE:	AS SHOWN	REVISION:	0

FILE: S:\AGL\GIS_AGL_Augusta\MXD\17thSACAER012015Event\17thSaCAER_FC-4GWBdrkTZ.mxd

FIGURE C-4
3-POINT GRADIENT ESTIMATION FOR THE BEDROCK AND TRANSITION WELLS - JANUARY 12, 2015

17th Semiannual Corrective Action Effectiveness Report - January 2015 Groundwater Monitoring Event

Atlanta Gas Light Company
Former Manufactured Gas Plant
Augusta, Richmond County, Georgia

ERM

ERM Analytical Data Validation Checklist

Appendix D

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Sample Submittals
AGLC/Augusta
January 12-29, 2015 Sampling Event

Matrix	Sample ID	Laboratory ID
Water	MW-21-20150112-01	1501859-001
Water	MW-320-20150112-01	1501859-002
Water	MW-207-20150112-01	1501859-003
Water	MW-402S-20150112-01	1501859-004
Water	MW-310BR-20150112-01	1501859-005
Water	MW-307D-20150112-01	1501859-006
Water	TB-01	1501859-007
Water	MW-321-20150113-01	1501895-001
Water	MW-325-20150113-01	1501895-002
Water	MW-602-20150113-01	1501895-003
Water	MW-306D-20150113-01	1501895-004
Water	MW-324-20150113-01	1501895-005
Water	MW-213-20150113-01	1501895-006
Water	MW-408D-20150113-01	1501895-007
Water	MW-307SAP-20150113-01	1501895-008
Water	MW-306TZ-20150113-01	1501895-009
Water	MW-202DR-20150113-01	1501895-010
Water	MW-214-20150113-01	1501895-011
Water	MW-402D-20150113-01	1501895-012
Water	MW-315-20150113-01	1501895-013
Water	MW-303-20150113-01	1501895-014
Water	MW-22-20150113-01	1501895-015
Water	MW-310SAP-20150113-01	1501895-016
Water	MW-313-20150113-01	1501895-017
Water	MW-309BR-20150113-01	1501895-018
Water	DUP-01-20150113-01	1501895-019
Water	DUP-02-20150113-01	1501895-020
Water	TB-01	1501895-021
Water	TB-02	1501895-022
Water	MW-306SAP-20150114-01	1501A32-001
Water	MW-504BR-20150114-01	1501A32-002
Water	MW-511BR-20150114-01	1501A32-003
Water	MW-500BR-20150114-01	1501A32-004
Water	MW-600-20150114-01	1501A32-005
Water	MW-510BR-20150114-01	1501A32-006
Water	MW-306BR-20150114-01	1501A32-007
Water	MW-601-20150114-01	1501A32-008
Water	MW-513BR-20150114-01	1501A32-009
Water	MW-12-20150114-01	1501A32-010
Water	MW-401D-20150114-01	1501A32-011
Water	MW-206-20150114-01	1501A32-012

Sample Submittals
AGLC/Augusta
January 12-29, 2015 Sampling Event

Matrix	Sample ID	Laboratory ID
Water	MW-319-20150114-01	1501A32-013
Water	MW-318-20150114-01	1501A32-014
Water	MW-203-20150114-01	1501A32-015
Water	MW-512BR-20150114-01	1501A32-016
Water	MW-404DR-20150114-01	1501A32-017
Water	MW-19-20150114-01	1501A32-018
Water	MW-401SAP-20150114-01	1501A32-019
Water	DUP-03-20150114-01	1501A32-020
Water	TB-01	1501A32-021
Water	MW-509BR-20150115-01	1501A82-001
Water	MW-505D-20150115-01	1501A82-002
Water	MW-505D-20150115-01	1501A82-002
Water	MW-507BR-2015115-01	1501A82-003
Water	MW-501S-20150115-01	1501A82-004
Water	MW-401S-20150115-01	1501A82-005
Water	MW-408DR-20150115-01	1501A82-006
Water	MW-508BR-20150115-01	1501A82-007
Water	MW-304-20150115-01	1501A82-008
Water	MW-408S-20150115-01	1501A82-009
Water	MW-503BR-20150115-01	1501B40-001
Water	MW-311-20150115-01	1501B40-002
Water	MW-307BR-20150115-01	1501B40-003
Water	DUP-4-20150115-01	1501B40-004
Water	TB-01	1501B40-005
Water	TB-01-20150129-01	1501N94-001
Water	DUP-05-20150129-01	1501N94-002
Water	DUP-06-20150129-01	1501N94-003
Water	MW-308BR-20150129-01	1501N94-004
Water	MW-307D-20150129-01	1501N94-005
Water	MW-207-20150129-01	1501N94-006
Water	MW-401SAP-20150129-01	1501N94-007
Water	MW-309BR-20150129-01	1501N94-008

ERM Analytical Data Validation Checklist

Project Name: AGLC/Augusta	Laboratory: Analytical Environmental Services, Inc.
Project Reference: 0230712	Sample Matrix: Aqueous
ERM Project Phase Number: 054	1/12/2015
Date Validated: April 28, 2015	Sample End Date: 1/29/2015

Sample Analyzed: At least ten percent (10%) of the samples collected were chosen for validation. The following samples within were validated. For a full list of the samples collected, see the sample submittal summary above.

DUP-01-20150113-01	MW-306TZ-20150113-01	DUP-4-20150115-01	MW-307BR-20150115-01
DUP-02-20150113-01	MW-315-20150113-01	DUP-05-20150129-01	MW-308BR-20150129-01
DUP-03-20150114-01	MW-12-20150114-01	DUP-06-20150129-01	MW-401SAP-20150129-01

Parameters Analyzed: Volatile Organic Compounds by SW-5030B method 8260B, CH_4 by RSK method RSK-175, O_2 by E360.1, CO_2 by SM4500, Semivolatile Organic Compounds by SW-846 method 8270D, Total ICP Metals (Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, V, and Zn) by SW-3010A Method 6010C, Total Mercury (Hg) by method SW7470A, Total Cyanide by method SM4500 CN-C E, Nitrate and sulfate by Method 9056, and Ferrous Iron (Fe^{2+}) by Standard Method SM 3500-Fe-B.

Laboratory Project IDs: 1407C32, 1407D48, 1407E29, and 1407F77

PRECISION, ACCURACY, METHOD CONFORMANCE, AND COMPLETENESS ASSESSMENT

Precision:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Laboratory precision was evaluated using laboratory control samples (LCSs), laboratory duplicates, and matrix spike duplicates (MSDs). Field sampling precision was evaluated using field duplicates. Evaluation of duplicates was done using the Relative Percent Difference (RPD). The RPD is defined as the difference between two duplicate sample results divided by the mean, and expressed as a percent. Overall, laboratory and field sampling precision were acceptable.

Accuracy:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Accuracy is a measure of the system bias. Laboratory accuracy was evaluated using blanks, matrix spikes (MSs), LCSs, and surrogate recoveries. Overall, laboratory accuracy was acceptable.

Method Compliance:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Method compliance was evaluated using holding times, internal standard recoveries, and surrogate recoveries. Overall method compliance was acceptable.

Completeness:	**X**	Acceptable		Unacceptable	TN	Initials

Comments: Completeness is a percentage expression of the ratio of total acceptable data points to the total possible data points. No data points were rejected; all data are usable with some usable with qualification. For the sample data validated, no data points were rejected. The data set was 100% complete.

ERM Analytical Data Validation Checklist (Continued)

EVALUATION CRITERIA CHECK						
Data validation flags used in this review only include those used by the laboratory: BRL Below Reporting Limit. Indicates the analyte was analyzed for but not detected. H Sample was prepped or analyzed beyond the specified hold time **Only bolded comments required qualification.** The other comments are of interest, but qualification of the results was not necessary.						
1. Did the laboratory identify any nonconformances related to	**X**	Yes		No	TN	Initials
Explanation: The laboratory identified the following nonconformance in the case narratives for the samples validated. Samples 1501895-006B, -009B; 1501A32-004A, -005A, -008A; 1501A32-014C; 1501B40-003A, -004A; 1501N94-002A and -004A required dilution during preparation and/or analysis resulting in elevated reporting limits. Samples for Dissolved Oxygen were received and analyzed outside holding time of "immediate or 15 minutes." Duplicate samples were analyzed with an H-Flag due to no collection times listed on COCs (withholding collection times was intentional). For all Method 3500Fe-B applicable for analyzing Ferrous Iron in the field: samples requiring Ferrous Iron were analyzed in the laboratory which is a deviation from the standard field anaysis method.						
2. Were samples Chain-of Custody (COC) forms complete?	**X**	Yes		No	TN	Initials
Comments: An extra set of Trip Blank VOA bottles were received along with the samples collected on 7/16/2014; these bottles were not listed on the COC. Sample containers were not received for MNA analysis for samples "MW-307BR-20150115-01 and DUP-4-20150115-01. Methane analysis was not listed on the COC but was reported per project requirements for samples 1501N94-003, -007, and -008.						
3. Were all the analyses requested for the samples on the COCs completed by the laboratory?	**X**	Yes		No	TN	Initials
Comments: All requested COC analyses were completed by the laboratory except for TB-02 canceled by ERM on 1/16/2015. Methane analysis was not on the COC but was reported for samples 1501N94-003, -007, and -008. Sample "MW-319-20150115-01" was not analyzed for MS/MSD per ERM on 1/20/15.						
4. Were samples received in good condition and at appropriate temperature?	**X**	Yes		No	TN	Initials
Comments: Samples were received in good condition and temperatures ranging from 3.1 to 3.9 degrees C.						
5. Were the requested analytical methods in compliance with WP/QAPP, permit, or COC?	**X**	Yes		No	TN	Initials
Comments: Requested analytical methods were in compliance with COC forms. Additionally, the test results in the validated report meet all NELAP requirements for parameters for which accreditation is required or available.						
6. Were detection limits in accordance with WP/QAPP, permit, or method?	**X**	Yes		No	TN	Initials
Comments: Results were reported down to the practical quantitation limits.						
7. Do the laboratory reports include only those constituents requested to be reported for a specific analytical method?	**X**	Yes		No	TN	Initials
Comments: The laboratory reported the requested constituents.						

ERM Analytical Data Validation Checklist (Continued)

8. Were the sample holding times met?		Yes	**X**	No	TN	Initials
Comments: Dissolved oxygen (DO) by Method 360.1. This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. Certain samples for ferrous iron were analyzed outside of the specified 24 hour hold time by Standard Method SM 3500.						
9. Were correct concentration units reported?	**X**	Yes		No	TN	Initials
Comments: Organic results were reported in µg/L. ICP metals and general chemistry results were reported in mg/L.						
10. Were the reporting requirements for flagged data met?	**X**	Yes		No	TN	Initials
Comments: The reporting requirements for flagged data were met. Data validation qualifiers supersede laboratory flags.						
11. Were laboratory blank samples free of target analyte contamination?	**X**	Yes		No	TN	Initials
Comments: The lab blanks were free of target analyte contamination						
12. Were trip blank, field blank, and/or equipment blanks free of target analytes	**X**	Yes		No	TN	Initials
Comments: Trip blanks were free of target analytes.						
13. Were instrument calibrations within method control limits?	**X**	Yes		No	TN	Initials
Comments: Initial and continuing calibrations were within required method criteria for the target analytes.						
14. Were surrogate recoveries within control limits?	**X**	Yes		No	TN	Initials
Comments: All surrogate recoveries were within laboratory QC limits.						
15. Were laboratory control sample recoveries within control limits?	**X**	Yes		No	TN	Initials
Comments: All LCS recoveries outside control limits are listed in question 1 - the data have been reported and qualified.						
16. Were matrix spike recoveries within control limits?	**X**	Yes		No	TN	Initials
Comments: All of the MS/MSD and matrix interference checks were within the laboratory QC/advisory limits for all target compounds except for those listed in question 1.						
17. Were duplicate RPDs and/or serial dilution %Ds within control limits?		Yes	**X**	No	TN	Initials
Comments: RPDs for MS/MSDs, laboratory duplicate samples and LCS/LCSDs met QC criteria for all target compounds/analytes for the samples validated except where noted for sample MW-12-20150114-01.						
18. Were organic system performance criteria met?	**X**	Yes		No	TN	Initials
Comments: All GC/MS internal standards were within method criteria for the samples validated.						
19. Were internal standards within method criteria for GS/MS sample analyses?	**X**	Yes		No	TN	Initials
Comments: All GC/MS internal standards were within method criteria for the samples validated.						
20. Were inorganic system performance criteria met?	**X**	Yes		No	TN	Initials
Comments: Inorganic system performance criteria were met.						

ERM Analytical Data Validation Checklist (Continued)

21. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.		**X**	Yes		No	TN	Initials
Duplicate Sample No.	DUP-01-20150113-01	Primary Sample No.		MW-306TZ-20150113-01			
Duplicate Sample No.	DUP-02-20150113-01	Primary Sample No.		MW-315-20150113-01			
Duplicate Sample No.	DUP-03-20150114-01	Primary Sample No.		MW-12-20150114-01			
Duplicate Sample No.	DUP-4-20150115-01	Primary Sample No.		MW-307BR-20150115-01			
Duplicate Sample No.	DUP-05-20150129-01	Primary Sample No.		MW-308BR-20150129-01			
Duplicate Sample No.	DUP-06-20150129-01	Primary Sample No.		MW-401SAP-20150129-01			
Comments: Results for primary and field duplicate samples were nondetect for those constituent pairs with an NC in the RPD column in the following tables. RPD's greater than 30% are highlighted because this variation is greater than the advisory limit.							
22. Were qualitative criteria for organic target analyte identification met?		**X**	Yes		No	TN	Initials
Comments: All qualitative criteria for organic target analyte identification were met.							
23. Were 100% of the EDD concentrations and reporting limits compared to the hardcopy data reports?		**X**	Yes		No	TN	Initials

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-01-20150113-01		MW-306TZ-20150113-01		RPD(%)
Acenaphthene	21	µg/L	18	µg/L	15
Anthracene	0.25	µg/L	0.25	µg/L	0
Fluoranthene	0.13	µg/L	0.12	µg/L	8
Fluorene	2.2	µg/L	2	µg/L	10
Naphthalene	300	µg/L	240	µg/L	22
Phenanthrene	1.1	µg/L	0.95	µg/L	15
Pyrene	0.12	µg/L	0.11	µg/L	9
Barium	0.741	mg/L	0.735	mg/L	1
Xylenes	6.3	µg/L	6.8	µg/L	8

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-02-20150113-01		MW-315-20150113-01		RPD(%)
Carbon dioxide	69.2	mg/L	77.9	mg/L	12
Iron, as Ferrous (Fe+2)	6.53	mg/L	6.36	mg/L	3
Oxygen	7.01	mg/L	7.68	mg/L	9
Methane	57	µg/L	60	µg/L	5
Barium	0.459	mg/L	0.455	mg/L	1
Acenaphthene	0.65	µg/L	0.56	µg/L	15
Sulfate	4.9	mg/L	5.5	mg/L	12

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-03-20150114-01		MW-12-20150114-01		RPD(%)
Carbon dioxide	259	mg/L	251	mg/L	3
Iron, as Ferrous (Fe+2)	7.79	mg/L	6.66	mg/L	16
Oxygen	**5.98**	**mg/L**	**3.02**	**mg/L**	**66**
Methane	3700	µg/L	3000	µg/L	21
Barium	0.236	mg/L	0.231	mg/L	2
Benzene	3600	µg/L	3500	µg/L	3
Ethylbenzene	990	µg/L	930	µg/L	6
Toluene	740	µg/L	720	µg/L	3
Xylenes	980	µg/L	940	µg/L	4
Acenaphthene	73	µg/L	69	µg/L	6
Acenaphthylene	**3.3**	**µg/L**	**1.7**	**µg/L**	**64**
Anthracene	1.9	µg/L	1.5	µg/L	24
Fluoranthene	0.35	µg/L	0.26	µg/L	30
Fluorene	23	µg/L	18	µg/L	24
Naphthalene	4900	µg/L	3700	µg/L	28
Phenanthrene	14	µg/L	11	µg/L	24
Pyrene	**0.32**	**µg/L**	**0.23**	**µg/L**	**33**

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-4-20150115-01		MW-307BR-20150115-01		RPD(%)
Barium	0.826	mg/L	0.804	mg/L	3
Zinc	0.0802	mg/L	0.0746	mg/L	7
Benzene	12000	µg/L	12000	µg/L	0
Ethylbenzene	2100	µg/L	2000	µg/L	5
Xylenes	770	µg/L	720	µg/L	7
Acenaphthene	220	µg/L	220	µg/L	0
Anthracene	6.6	µg/L	7.2	µg/L	9
Benzo(a)anthracene	0.15	µg/L	0.2	µg/L	29
Chrysene	0.11	µg/L	0.13	µg/L	17
Fluoranthene	3.1	µg/L	3.5	µg/L	12
Fluorene	46	µg/L	48	µg/L	4
Naphthalene	8100	µg/L	6700	µg/L	19
Phenanthrene	44	µg/L	46	µg/L	4
Pyrene	3.6	µg/L	4.1	µg/L	13

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-05-20150129-01		MW-308BR-20150129-01		RPD(%)
					NC
Barium	1.15	mg/L	1.11	mg/L	4
Zinc	0.0508	mg/L	0.0472	mg/L	7
Benzene	6100	µg/L	6600	µg/L	8
Ethylbenzene	720	µg/L	810	µg/L	12
Toluene	1900	µg/L	2100	µg/L	10
Xylenes	740	µg/L	880	µg/L	17
Acenaphthene	46	µg/L	46	µg/L	0
Acenaphthylene	63	µg/L	66	µg/L	5
Anthracene	7.5	µg/L	7	µg/L	7
Benzo(a)anthracene	9.9	µg/L	9.6	µg/L	3
Benzo(a)pyrene	11	µg/L	11	µg/L	0
Benzo(b)fluoranthene	10	µg/L	10	µg/L	0
Benzo(g,h,i)perylene	6.2	µg/L	5.9	µg/L	5
Benzo(k)fluoranthene	3.2	µg/L	3.3	µg/L	3
Chrysene	8.3	µg/L	7.8	µg/L	6
Dibenzo(a,h)anthracene	1.2	µg/L	1.1	µg/L	9
Fluoranthene	12	µg/L	12	µg/L	0
Fluorene	21	µg/L	22	µg/L	5
Indeno(1,2,3-cd)pyrene	4.9	µg/L	4.8	µg/L	2
Naphthalene	3200	µg/L	3400	µg/L	6
Phenanthrene	29	µg/L	28	µg/L	4
Pyrene	19	µg/L	17	µg/L	11

ERM Analytical Data Validation Checklist (Continued)

Field Duplicate Comparisons
ACLC/Augusta

January 12-29, 2015 Sampling Event

Parameter	DUP-06-20150129-01		MW-401SAP-20150129-01		RPD(%)
Carbon dioxide	60.4	mg/L	65.5	mg/L	8
Oxygen	8.45	mg/L	8.44	mg/L	0
Barium	0.0566	mg/L	0.0576	mg/L	2
Mercury	0.00034	mg/L	0.00036	mg/L	6
Trichloroethene	20	µg/L	19	µg/L	5
Nitrate as N	2.4	mg/L	2.6	mg/L	8
Sulfate	41	mg/L	43	mg/L	5

Summary of Historical Groundwater Sampling Data – Alluvium, Galliard, and Saprolite Monitoring Wells

Appendix E1

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-05																													
			7/14/2014	1/6/2014	7/8/2013	1/7/2013	7/23/2012	1/16/2012	7/5/2011	1/17/2011	7/13/2010	1/5/2010	01/10 DUP	1/13/2009	7/15/2008	1/9/2008	7/10/2007	2/14/2007	7/11/2006	1/10/2006	7/21/2005	1/18/2005	7/16/2004	1/22/2004	7/19/2003	1/20/2003	7/9/2002	1/17/2002	7/11/2001	07/01 DUP	1/18/2001
			Post-ISCO																		Pre-ISCO											
Field Parameters																																
Conductivity	*	mS/cm	0.742	0.646	0.695	0.742	0.048	0.660	0.750	0.370	0.674	0.653	0.653	1.230	0.792	0.816	0.631	0.893	0.830	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.69	2.04	0.08	0.16	0.18	3.14	2.06	5.5	0.31	0.13	0.13	5.82	0.21	0.36	0.22	0.71	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-15.0	-67.0	-18.9	-58.0	-34.8	175.0	-55.7	65.0	-47.2	-36.8	-36.8	-35.8	-45.4	-51.9	-16.4	-67.5	-76.2	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.14	6.32	6.91	6.03	5.92	2.30	5.68	0.586	5.82	6.08	6.08	0.804	5.94	6.11	5.96	5.96	6.11	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	24.8	17.72	22.93	22.16	24.77	19.27	25.26	17.65	25.55	19.18	19.18	18.27	24.68	20.8	22.81	17.05	24.95	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.57	3.34	1.52	4.44	3.13	3.98	7.69	NA	3.09	3.94	3.94	2.4	3.12	1.09	3.88	1.03	3.41	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30.8	31	32	38	33	29	33	33	33	37	36	36
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	1.95	2	2.2	2.2	2	2.1	2.2	2.3 N	2.2 N	2.2 N	2.1
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	< 50	**58**	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	**230**	**29**	**32**	< 25
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.72 J**	< 1.0	< 1.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.12 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.5 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	**0.60 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.24 J**	< 1.0	< 1.0
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	<0.19	< 0.19	<0.19	**0.027 J**	**0.023 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.050	<0.050	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.050	**0.090**	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.10	<0.10	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.043	< 0.047	< 0.055	< 0.047	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	<0.050	<0.050	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	**0.14**	**0.20**	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.20	**0.14**	**0.21**	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.21	< 0.097	< 0.11	**0.22 J**	**0.13 J**	<0.19	<0.19	<0.19	**0.038 J**	**0.090 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	<0.19	<0.19	<0.19	**0.048 J**	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.21	< 0.097	< 0.11	< 0.12	< 0.10	<0.19	<0.19	<0.19	**0.034 J**	**0.034 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	**0.21**	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	**3.3**	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	**0.072 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	**0.0071 J**	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.020	< 0.02	< 0.02	< 0.01	< 0.006	< 0.02	**0.011**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0057 B**
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	**0.0082 J**	**0.022**	< 0.0046	<0.020	<0.020	<0.020	**0.0069 J**	< 0.010	<0.0500	<0.050	< 0.05	< 0.05	< 0.01	< 0.01	< 0.01	**0.017**	< 0.01	< 0.01	**0.0034 B**	< 0.01	**0.0048 B**	< 0.01	**0.0051 B**	< 0.01
Barium	2	mg/L	**0.349**	**0.366**	**0.368**	**0.33**	**0.39**	**0.36**	**0.38**	**0.36**	**0.34**	**0.36**	**0.36**	**0.37**	**0.37**	**0.343**	**0.363**	**0.366**	**0.337**	**0.366**	**0.403**	**0.38**	**0.41**	**0.39**	**0.4**	**0.39**	**0.39**	**0.41**	**0.39**	**0.4**	**0.4**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	**0.00028 J**	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.005	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	**0.00083 B**	**0.00059 B**	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00094 B**
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**53.5**	**53.6**	**57**	**58**	**64**	**56**	**60**	**60**	**63**	**61**	**62**	**61**	
Chromium	0.1	mg/L	< 0.0100	<0.0100	< 0.0100	<0.010	< 0.0012	**0.0013 J**	**0.0051 J**	**0.0018 J**	<0.010	<0.010	<0.010	**0.0018 J**	< 0.010	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01N	< 0.01N	< 0.01
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.007	< 0.01	< 0.01	**0.019**	< 0.01	< 0.01	**0.002 B**	**0.0021 J**	**0.0017 B**	**0.0018 B**	**0.0023 B**	**0.0017 B**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	**0.0040 J**	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0016 B**	< 0.02	< 0.02	< 0.02N	< 0.02N	**0.00096 B**	
Cyanide	0.2	mg/L	0.02	<0.0100	**0.012**	**0.014**	**0.013**	**0.0098 J**	**0.031**	**0.012**	**0.0080 J**	**0.013**	**0.014**	**0.012**	**0.0079 J**	< 0.010	< 0.010	**0.005**	< 0.01	< 0.01	< 0.01	< 0.01	**0.011**	< 0.01	< 0.01	< 0.015	**0.01**	< 0.01	**0.0098 B**	**0.014**	**0.0095 B**	**0.0059 B**
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	<0.010	< 0.0040	< 0.0040	**0.0051 J**	< 0.0040	<0.010	<0.010	<0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0018	< 0.005	< 0.005	**0.0018 B**	< 0.005
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.5**	**21.1**	**23**	**23**	**25**	**25**	**23**	**24**	**24**	**23**	**24**	**22**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	**0.00012 B**	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	**0.015 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.020	< 0.02	< 0.02	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**10.7**	**9.54**	**11**	**14**	**13**	**11**	**11**	**7.6**	**8.8 N**	**17**	**14**	**8.6**	
Selenium	0.05	mg/L	< 0.0200	<0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.020	< 0.02	< 0.02	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	**0.02**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**43.9**	**47.4**	**48**	**49**	**24**	**41**	**46**	**39**	**38**	**44**	**43**	**41**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.001	< 0.001	< 0.001	< 0.001	**0.035**	< 0.001	< 0.001	< 0.002	< 0.002WN	< 0.002 J	< 0.002	< 0.002	< 0.002	< 0.002	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	**0.0075 J**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	< 0.01	< 0.007	< 0.01	< 0.01	**0.01**	< 0.01	< 0.01	< 0.01	< 0.01	**0.0025 B**	< 0.01	< 0.01	< 0.01	
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.0242**	< 0.020	< 0.0087	**0.027**	**0.51**	**0.037**	< 0.020	**0.12**	**0.1**	**0.045**	< 0.020	< 0.0200	**0.146**	< 0.02	< 0.02	< 0.02	**0.02**	< 0.02	**0.5**	< 0.02	**0.03**	**0.025**	< 0.02	**0.012 B**	< 0.02	**0.016 B**	**0.024**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
< - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-12																												
		Sample Date	1/14/2015	01/15 DUP	7/14/2014	07/14 DUP	1/8/2014	01/14 DUP	7/10/2013	07/13 DUP	1/9/2013	1/13 DUP	7/25/2012	07/12 DUP	1/18/2012	01/12 DUP	07/11 DUP	7/5/2011	01/11 DUP	1/18/2011	07/10 DUP	7/14/2010	1/6/2010	01/10 DUP	7/23/2009	7/22/2008	07/22 DUP	1/8/2008	01/08 DUP	7/10/2007	07/07 DUP	2/14/2007
		Unit	Post-ISCO																												
Field Parameters																															
Conductivity	*	mS/cm	0.252	0.252	0.199	0.199	0.197	0.197	0.237	0.237	0.390	0.390	0.430	0.430	0.364	0.364	0.421	0.421	0.280	0.280	0.475	0.475	0.389	0.389	0.747	0.768	0.768	0.888	0.888	0.692	0.692	0.567
Dissolved Oxygen (YSI)	*	mg/L	0.33	0.33	0.14	0.14	0.64	0.64	0.98	0.98	0.42	0.42	0.68	0.68	1.74	1.74	0.49	0.49	5.41	5.41	0.3	0.3	3.41	3.41	5.54	1.05	1.05	0.87	0.87	1.44	1.44	0.27
Oxidation Reduction Potential	*	mV	-11.2	-11.2	-96.3	-96.3	-16.7	-16.7	-96.0	-96.0	32.6	32.6	-22.0	-22.0	-22.0	-22.0	-22.2	-22.2	93	93	-81.8	-81.8	-48.9	-48.9	-256.1	-165.4	-165.4	-156.6	-156.6	-31.8	-31.8	-112.5
pH	*	SU	5.46	5.46	5.83	5.83	5.86	5.86	5.72	5.72	5.94	5.94	6.04	6.04	6.33	6.33	6.17	6.17	0.284	0.284	6.13	6.13	6.92	6.92	6.69	6.35	6.35	5.76	5.76	6.47	6.47	5.51
Temperature	*	Celsius	12.40	12.40	21.61	21.61	18.28	18.28	20.20	20.20	14.85	14.85	22.04	22.04	19.31	19.31	21.65	21.65	18.71	18.71	22.36	22.37	15.24	15.24	24.37	22.56	22.56	20.63	20.63	21.93	21.93	19.13
Turbidity	*	NTU	1.47	1.47	0.38	0.38	0.56	0.56	0.86	0.86	0.61	0.61	5.45	5.45	0.79	0.79	4.88	4.88	9	9	3.97	3.97	2.13	2.13	76.6	18.9	18.9	4.49	4.49	41.4	41.4	0.50
Monitored Natural Attenuation Parameters																															
Carbon Dioxide	*	µg/L	251	259	176	162	258	257	173	171	210	230	230	220	2,900 B	2,500 B	2,300 * B	2,200 * B	1,900	2,300	1,600 JB	1,600 JB	1,200	1,300	740	2,000	1,900	< 1,000	< 1,000	< 1,000	< 1,000	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	6.66	7.79 H	4.08	4.21	11	4.25 H	2.92	2.77 H	5.8 HF	5.7 HF	7.7 HF	7.8 HF	5.9 HF	7.7 HF	5.4 HF	4.9 HF	6.4 HF	6.2 HF	7.0 HF	6.3 HF	3.9 HF	4.0 HF	< 0.10 HF	3.9	4.2	29.2	30.0	22.5	20.9	30.2
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	3,000	3,700	3,200	2,900	2,000	1,800	1,600	1,400	1,300	770	630	740	720	1,100	980	910	510	1,100	1,300	1,500	560	710	930	1600	990	2,000	2,100	1,100	1,300	1,500
Nitrate	*	mg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.075	< 0.075	< 0.36	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 0.50	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	3.02 H	5.98 H	5.76 H	5.01 H	7.10 H	7.09 H	4.71 H	5.76 H	4.6	4.8	4.5	3.9	0.9	1.0	1.4	1.4	1.4	1.1	1.3	1.3	1.3	1.3	1.1	1.1	0.92	0.81	1.0	2.0	1.8	0.83
Sulfate	*	mg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.6	1.5	31	31	33	34	19	32	9.5	8.4	9.8	9.9	5.1	6.2	8.5	11	40	68	69	210	220	130	120	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	170
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 1,000	< 1,000	< 50	< 50	< 50	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 50	< 25	< 100	< 25	**190 J**	**11 J**	< 5,000	< 5,000	< 5,000	< 1,000	< 2,000	< 50	< 50	< 2,500	< 2,500	**120**
Benzene	5	µg/L	**3,500**	**3,600**	**5,700**	**5,500**	**2,200**	**2,200**	**1,900**	**1,900**	**220**	**120**	**73**	**69**	**100**	**71**	**590**	**210**	**410**	**540**	**2,300**	**1,800**	**3,500**	**3,600**	**3,600**	**1,800**	**1,800**	**2,000**	**2,100**	**7,500**	**7,200**	**9,900**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 0.60	< 6.0	< 3.0	< 12	< 3.0	< 100	< 5.0	< 250	< 250	< 250	< 50	< 100	< 5.0	< 5.0	< 5	< 250	< 5
Ethylbenzene	700	µg/L	**930**	**990**	**1,700**	**1,600**	**720**	**680**	**540**	**530**	**93**	**52**	**39**	**34**	**120**	**76**	**240**	**130**	**190**	**280**	**600**	**470**	**730**	**760**	**470**	**440**	**390**	**290**	**270**	**530**	**500**	**1,000**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 10	< 5.0	< 20	< 5.0	< 100	< 5.0	< 250	< 250	< 250	< 50	< 100	< 5.0	< 5.0	< 5	**940**	< 5
Toluene	1,000	µg/L	**720**	**740**	**660**	**680**	**330**	**330**	**160**	**200**	< 5.0	< 5.0	< 5.0	< 5.0	< 3.3	**0.90 J**	**5.9 J**	**2.9 J**	**7.9 J**	**8.3 J**	**25 J**	**24**	< 250	< 250	**370**	**3.8 J**	< 100	**39**	**40**	**340**	**320**	**2,000**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.13	< 1.3	< 0.65	< 2.6	< 0.65	< 100	< 5.0	< 250	< 250	< 250	< 50	< 100	< 5.0	< 5.0	< 5	< 250	< 5
Xylenes, total	2,000	µg/L	**940**	**980**	**1,300**	**1,300**	**530**	**520**	**350**	**330**	**8.2**	**6.4**	< 5.0	< 5.0	< 2.0	**3.3 J**	**30 J**	**20 J**	**52 J**	**70**	**280**	**270**	**450**	**470**	**410**	**48 J**	**48 J**	**110**	**120**	**400**	**370**	**1,100**
Semivolatile Organic Compounds																															
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	2,000	µg/L	**69**	**73**	**110**	**120**	**71**	**68**	**23**	**25**	< 22	< 22	**33**	**20**	**32**	**52**	**21**	**22**	**28**	**24**	< 94	< 190	<100	<100	< 3.8	**27**	**44**	**31**	**28**	**26**	**25**	**31**
Acenaphthylene	10	µg/L	**1.7**	**3.3**	**20**	**21**	**10.0**	**12.0**	**1.0**	**1.0**	< 22	< 22	< 9.5	< 9.5	**1.8**	**4.8**	**2.4**	**2.8**	**5.8**	**5.2**	< 94	< 190	<100	<100	< 3.8	**1.0 J**	< 3.9	< 10	< 10	< 10	< 10	**11**
Anthracene	10	µg/L	**1.5**	**1.9**	**2.4**	**2.6**	**1.7**	**1.8**	**0.74**	**0.73**	< 22	< 22	< 9.5	< 9.5	**0.83**	**1.0 J**	< 1.1	< 1.1	**1.2 J**	< 0.99	< 94	< 190	<100	<100	< 3.8	**0.84 J**	**1.1 J**	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	**0.060**	< 0.050	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	**0.17 J**	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	< 0.05	**0.21**	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.10	< 0.10	< 0.1	**0.23**	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.044	< 0.45	< 0.48	< 0.48	< 0.43	< 0.44	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	< 0.05	< 0.050	< 0.05
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.10	< 0.10	< 0.1	**0.63**	< 0.1
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	1,000	µg/L	**0.26**	**0.35**	**0.56**	**0.58**	**0.28**	**0.32**	**0.16**	**0.16**	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**18**	**23**	**29**	**33**	**19**	**19**	**8.1**	**7.9**	< 22	< 22	< 9.5	< 9.5	**7.3**	**19**	**8.7**	**8.8**	**12**	**11**	< 94	< 190	<100	<100	< 3.8	**8.6**	**14**	**12**	**11**	**20**	**17**	**16**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 22	< 22	< 9.5	< 9.5	< 0.097	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 190	<100	<100	< 3.8	< 3.9	< 3.9	< 0.050	< 0.050	< 0.05	**0.53**	< 0.05
Naphthalene	20	µg/L	**3.700**	**4.900**	**5.700**	**6.200**	**3.800**	**3.300**	< n.so	< n.so	**480**	**450**	**880**	**520**	**630**	**3.300**	**950**	**690**	**1.500**	**1.300**	**2.800**	**3.000**	**3.100**	**2.200**	**340**	**2.000**	**2.500**	**2.100**	**2.400**	**4.200**	**4.500**	**3.100**
Phenanthrene	10	µg/L	**11**	**14**	**21**	**23**	**14**	**14**	**3.8**	**3.3**	< 22	< 22	< 9.5	< 9.5	**5.1**	**12**	**4.8**	**3.6**	**6.9**	**5.6**	< 94	< 190	<100	<100	< 3.8	**6.5**	**10**	**10**	< 10	**15**	**14**	**16**
Pyrene	1,000	µg/L	**0.23**	**0.32**	**0.44**	**0.47**	**0.27**	**0.3**	**0.13**	**0.15**	< 22	< 22	< 9.5	< 9.5	**0.11 J**	< 1.0	< 1.1	< 1.1	< 0.96	< 0.99	< 94	< 94	<100	<100	< 3.8	< 3.9	< 3.9	< 10	< 10	< 10	< 10	< 10
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.020	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	<0.0500	< 0.05	< 0.050	< 0.05
Barium	2	mg/L	**0.231**	**0.236**	**0.182**	**0.178**	**0.212**	**0.213**	**0.225**	**0.221**	**0.32**	**0.32**	**0.44**	**0.44**	**0.39**	**0.44**	**0.41**	**0.35**	**0.27**	**0.28**	**0.31**	**0.30**	**0.23**	**0.22**	**0.30**	**0.54**	**0.55**	**0.354**	**0.394**	**0.170**	**0.177**	**0.149**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00096 J**	**0.0014 J**	**0.00079 J**	**0.0011 J**	**0.0015 J**	**0.0013 J**	**0.00056 J**	**0.00055 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0133**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.005
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0012 J**	**0.0032 J**	**0.0023 J**	**0.0039 J**	**0.0025 J**	**0.0026 J**	**0.0014 J**	**0.0014 J**	<0.010	<0.010	**0.015**	**0.0039 J**	0.0033	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0136**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.01
Cyanide	0.2	mg/L	< 0.010	**0.012**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.011**	**0.019**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.0076	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	--	--	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.01
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	--	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	**0.0028 J**	< 0.0023	**0.0024 J**	**0.0033 J**	< 0.040	< 0.040	< 0.040	< 0.040	**0.09**	**0.0110 J**	0.011	**0.0787**	**0.0931**	**0.309**	**0.345**	**0.0349**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.02	< 0.020	< 0.02
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0033 J**	0.0023	< 1.00	< 1.00	< 1.00	< 1.00	< 0.001
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0200	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	**0.0030 J**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020	< 0.0100	< 0.0100	**0.0132**	**0.0122**	< 0.01
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.020	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-12 (continued)														MW-17	
		Sample Date	7/13/2006	2/8/2006	1/16/2006	7/21/2005	1/19/2005	7/16/2004	7/17/2003	1/20/2003	7/9/2002	1/17/2002	1/02 DUP	7/17/2001	1/17/2001	1/01 DUP	10/4/2006	10/06 (RA)
		Unit	Post-ISCO			Pre-ISCO											Post-ISCO	
Field Parameters																		
Conductivity	*	mS/cm	0.836	--	--	--	--	--	--	--	--	--	--	--	--	--	0.527	--
Dissolved Oxygen (YSI)	*	mg/L	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	1.15	--
Oxidation Reduction Potential	*	mV	-79.6	--	--	--	--	--	--	--	--	--	--	--	--	--	130.1	--
pH	*	SU	5.19	--	--	--	--	--	--	--	--	--	--	--	--	--	5.94	--
Temperature	*	Celsius	22.79	--	--	--	--	--	--	--	--	--	--	--	--	--	21.08	--
Turbidity	*	NTU	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	3.54	--
Monitored Natural Attenuation Parameters																		
Carbon Dioxide	*	µg/L	480	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	47.2	--	66.2	76.5	4.4	4.7	4.4	3.4	4.1	4.3	4.2	3.9	4.5	4.8	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	49.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	2.28	--	3.55	6.28	1.8	2.1	1.6	1.6	1.8	1.8 N	1.8 N	1.7	1.7	1.7	--	--
Manganese, Dissolved	*	mg/L	2.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	1,300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	9.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	0.5 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																		
Acetone	4,000	µg/L	**2,400**	--	3,300 U	1,200 U	25,000 U	25,000 U	5,000 U	5,000 U	5,000 U	5,000 U	12,000 U	1,200 U	5,000 U	5,000 U	50 U	--
Benzene	5	µg/L	**9,700**	--	**8,800**	**13,000**	**53,000**	**59,000**	**66,000**	**68,000 D**	**57,000 D**	**53,000 D**	--	**69,000 D**	**66,000 D**	**65,000 D**	5 U	--
Carbon Disulfide	4,000	µg/L	**20**	--	330 U	50 U	1,000 U	1,000 U	200 U	200 U	200 U	200 U	500 U	50 U	200,000 U	200,000 U	5 U	--
Ethylbenzene	700	µg/L	**630**	--	**700**	**1,500**	**4,600**	**4,400**	**5,200**	**4,800**	**4,200**	**5,200**	**5,700**	**6,000**	**6,400**	**6,200**	5 U	--
Methylene Chloride	5	µg/L	5 U	--	330 U	250 U	5,000 U	5,000 U	1,000 U	1,000 U	1,000 U	1,000 U	2,500 U	250 U	**68 JB**	**130 JB**	5 U	--
Toluene	1,000	µg/L	**2,900**	--	**1,900**	**4,000**	**18,000**	**19,000**	**21,000**	**14,000**	**13,000**	**14,000**	**15,000**	**21,000 D**	**18,000**	**17,000**	5 U	--
Trichloroethylene	5	µg/L	5 U	--	330 U	50 U	1,000 U	1,000 U	200 U	**38 J**	200 U	200 U	500 U	50 U	200 U	200 U	5 U	--
Xylenes, total	2,000	µg/L	**770**	--	670 U	**1,500**	**5,200**	**4,400**	**4,600**	**3,700 B**	**3,300**	**4,300**	**4,800**	**5,900**	**5,700**	**5,500**	5 U	--
Semivolatile Organic Compounds																		
2-Methylnaphthalene	*	µg/L	--	--	**270**	**260**	**470**	**380**	**510 J M**	**550 D**	**540**	**500**	**490**	**710**	**600**	**670**	--	--
Acenaphthene	2,000	µg/L	**22**	--	**44**	10 U	10 U	200 U	**88**	**99**	**100**	**92 J**	**90 J**	**110**	**100**	**110**	10 U	--
Acenaphthylene	10	µg/L	10 U	--	**22**	**26**	10 U	200 U	**89**	**64**	**67 J**	10 U	0.2 U	**110**	**88**	**98**	10 U	--
Anthracene	10	µg/L	10 U	--	**10**	10 U	10 U	200 U	10 U	**2.0 J**	10 U	10 U	0.2 U	**2.2 J**	50 U	**2.7 J**	10 U	--
Benz(a)anthracene	0.1	µg/L	0.05 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	**4.8 J**	**0.17 R**	0.05 UJ
Benzo(a)pyrene	0.2	µg/L	0.05 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	**0.23 R**	0.05 UJ
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	**0.25 R**	0.1 UJ
Benzo(g,h,i)perylene	10	µg/L	10 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	**5.7 J**	**4.8 J**	10 U	--
Benzo(k)fluoranthene	10	µg/L	10 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	10 U	--
Chrysene	0.2	µg/L	0.05 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	**4.3 J**	**4.2 J**	**0.15 R**	0.05 UJ
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	--	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	**5.2 J**	**0.32 R**	0.1 UJ
Dibenzofuran	1	µg/L	--	--	50 U	10 U	10 U	200 U	10 U	**6.0 J**	**6.2 J**	**5.3 J**	0.2 U	**7.2 J**	**6.5 J**	**7.5 J**	--	--
Fluoranthene	1,000	µg/L	10 U	0.0008 U	**16**	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	10 U	--
Fluorene	1,000	µg/L	**17**	--	**31**	**12**	10 U	200 U	**24**	**23**	**22 J**	10 U	0.2 U	**29 J**	**28 J**	**30 J**	10 U	--
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	--	10,000 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	**0.31 R**	0.05 UJ
Naphthalene	20	µg/L	**2,900**	--	**2,000**	**2,300**	**6,700**	**5,900**	**12,000 J M**	**7,600 D**	**8,900 D**	**8,600 D**	**8,700 D**	**10,000 D**	**10,000 D**	**11,000 D**	10 U	--
Phenanthrene	10	µg/L	**18**	--	**47**	**12**	10 U	200 U	**17**	**16**	**18 J**	**15 J**	**15 J**	**19 J**	**20 J**	**22 J**	10 U	--
Pyrene	1,000	µg/L	10 U	0.0008 U	**14**	10 U	10 U	200 U	10 U	10 U	10 U	10 U	0.2 U	50 U	50 U	50 U	10 U	--
Inorganic Compounds																		
Aluminum (fume or dust)	*	mg/L	--	--	**1.81**	**1.75**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.043 BN**	0.2 U	0.2 U	--	--
Antimony	0.01	mg/L	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0052 B**	0.02 U	**0.0053 B**	**0.0052 B**	0.02 U	--
Arsenic	0.05	mg/L	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0039 B**	0.01 U	**0.0056 B**	0.01 U	0.01 U	0.05 U	--
Barium	2	mg/L	**0.0631**	--	0.2 U	**0.0699**	**0.69**	**0.7**	**0.64**	**0.63**	**0.65**	**0.67**	**0.66**	**0.64**	**0.64**	**0.62**	**0.0453**	**--**
Beryllium	0.004	mg/L	**0.0266**	--	**0.0318**	**0.0278**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00091 B**	**0.00089 B**	0.004 U	**0.0022 B**	**0.0022 B**	0.01 U	--
Cadmium	0.005	mg/L	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--
Calcium metal	*	mg/L	--	--	**74.7**	**132**	**50**	**57**	**44**	**47**	**50**	**50**	**50**	**47**	**45**	**46**	--	--
Chromium	0.1	mg/L	**0.0386**	--	**0.0692**	**0.219**	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.04**	0.01 U	--
Cobalt	*	mg/L	--	--	**0.579**	**0.537**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Copper	1.3	mg/L	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.01 U	--
Cyanide	0.2	mg/L	**0.011**	--	0.01 U	0.01 U	**0.049**	**0.055**	0.015 U	**0.038**	**0.051**	**0.05**	**0.039**	**0.06**	**0.023**	**0.024**	0.01 U	--
Lead	0.015	mg/L	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0032 B**	**0.0025 B**	0.01 U	--
Magnesium	*	mg/L	--	--	**52.1**	**87.5**	**40**	**45**	**40**	**38**	**40**	**41**	**41**	**38**	**37**	**37**	--	--
Mercury	0.002	mg/L	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	**0.00015 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	--
Nickel	0.1	mg/L	**0.146**	--	**0.262**	**0.063**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.017 B**	0.02 U	--
Potassium	*	mg/L	--	--	**7.09**	**6.45**	**1.9**	**1.9**	**2**	**1.8**	**1.8**	**2 N**	**2 N**	**1.8**	**2.0**	**2.0**	--	--
Selenium	0.05	mg/L	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0047 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	--
Sodium	*	mg/L	--	--	**24.3**	**27.3**	**34**	**37**	**36**	**33**	**32**	**31**	**31**	**32**	**30**	**30**	--	--
Thallium	0.002	mg/L	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.002 U	0.002 UWN	0.002 UJ	0.002 U	0.002 U	0.002 UN	0.002 U	0.002 U	0.001 U	--
Vanadium (fume or dust)	0.2	mg/L	**0.0174**	--	**0.0303**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--
Zinc	2	mg/L	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-19																													
		Sample Date	1/14/2015	7/17/2014	1/9/2014	7/10/13	1/9/2013	7/25/2012	1/19/2012	7/6/2011	1/18/2011	7/13/2010	1/11/2010	7/23/2009	1/13/2009	7/17/2008	1/10/2008	7/12/2007	2/13/2007	7/13/2006	2/8/2006	1/10/2006	7/20/2005	7/12/2004	2/10/2004	7/15/2003	1/17/2003	7/11/2002	1/21/2002	1/02 DUP	7/12/2001	1/17/2001
		Unit	Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.529	0.626	0.472	0.630	0.520	0.744	0.484	0.602	1.86	0.808	0.775	0.819	2.68	0.785	0.900	1.437	0.868	1.245	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.77	0.98	0.90	0.42	1.39	1.59	0.92	1.99	6.08	3.81	4.54	1.57	6.15	6.85	8.78	3.53	12.21	3.09	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	113.4	83.9	128.2	96.4	134.3	100	127.0	139.9	144.8	-130.1	19.2	70.1	84.7	124.1	226.7	162.3	203	148.2	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.84	6.26	6.34	6.18	6.18	6.14	6.12	5.68	0.662	8.68	9.22	5.82	7.65	6	5.85	6.16	6.21	6.25	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.00	25.86	17.37	23.71	20.66	29.00	21.48	24.68	18.46	25.71	15.62	24.07	17.55	23.83	20.26	22.75	19.81	21.96	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.55	0.42	9.12	5.36	9.45	3	8.3	52.4	117	8.5	9.85	8.12	3.46	3.24	3.68	12.3	3.11	29.8	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	236	198	272	251	110	120	1,300 B	1,200 * B	1,100	NA	910	880	1,200	1,000	< 1000	< 1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.14	--	1.9	1.08	0.56	0.16	0.04 U	0.15	0.11	0.74	0.71	0.044 B	0.12
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	0.17 HF	NA	0.82 HF	3.9 HF	0.80 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.107	--	0.133	0.0624	0.013	0.01 U	0.58	0.48	0.46	0.38	0.39	0.34	0.48
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0108	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	7	7	6	1.1	< 0.58	< 0.29	< 0.29	< 0.19	NA	0.31	< 0.19	0.23	0.12	0.11	7.8	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.7	0.93	0.47	<0.25	0.46	0.76	1.3	1.7	7.5	NA	7.9	8.7	2	9.7	3.9	2.3	4.3	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.50 H	6.23 H	5.38 H	6.51 H	5.9	5.3	1.6	1.6	1.4	NA	1.4	1.2	1.3	1.6	8.7	12	12	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	87	120	110	110	100	140	55	88	94	NA	210	120	170	120	190	490	180	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	**5.2 J**	< 50	< 50	**120**	50 U	--	10 U	25 U	25 U	25 U	25 U	25 U	25 U	**17 J**	**14 J**	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**9,900**	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**10**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	**20**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**1,000**	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.35 J**	5.0 U	5.0 U	5.0 U	**0.26 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**2,000**	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.49 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**9.4**	**3.0 J**	**1.8 J**	**1.7 J**	< 5.0	< 5.0	**3.1 J**	**7.0**	< 5.0	< 5	< 5	5 U	--	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**1,100**	5 U	--	2.0 U	2.0 U	2.0 U	**2.5**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	< 0.20	< 0.20	< 0.19	< 0.20	< 10	< 10	**31**	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.19	< 0.098	**0.21 J**	**0.18 J**	< 0.19	**0.38**	< 0.20	**0.026 J**	< 0.20	< 10	< 10	**11**	10 U	0.2 U	**0.26**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	**0.092**	**0.15**	**0.1**	**0.11**	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	**0.24**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	**0.10 J**	**0.28**	**0.28**	< 0.19	**0.33**	< 0.20	< 0.19	< 0.20	**0.070**	**0.11**	< 0.05	**0.37**	0.2 U	**0.29**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)ovrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	**0.13 J**	**0.35**	**0.41**	< 0.19	**0.46**	< 0.20	< 0.19	< 0.20	**0.19**	**0.13**	< 0.05	**0.19**	0.2 U	**3.3**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	**0.20**	**0.23 J**	**0.19 J**	< 0.19	**0.39**	< 0.20	< 0.19	< 0.20	**0.15**	**0.16**	< 0.1	**0.22**	0.2 U	**3.9**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	**0.24 J**	**0.27**	< 0.19	**0.4**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	0.2 U	**3.9**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	**0.25**	**0.26**	< 0.19	**0.35**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	**0.11 J**	**0.30**	**0.35**	< 0.19	**0.31**	< 0.20	< 0.19	< 0.20	**0.070**	**0.10**	< 0.05	**0.12**	0.2 U	**3.3**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	< 0.20	< 0.20	< 0.19	< 0.20	**0.18**	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	**0.34**	**0.40**	< 0.19	**0.41**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	0.2 U	**0.41**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.65 J**
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.12	< 0.11	< 0.19	< 0.20	< 0.20	< 0.19	< 0.20	< 10	< 10	**16**	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)ovrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	**0.20 J**	**0.23**	< 0.19	**0.33**	< 0.20	< 0.19	< 0.20	**0.24**	**0.080**	< 0.05	**0.12**	0.2 U	**0.29**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	< 0.50	< 0.20	**0.49**	**0.20**	< 0.12	**0.42**	< 0.19	**9.4**	**0.54**	**0.026 J**	< 0.20	< 10	< 10	**3,100**	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	**0.13 J**	**0.12 J**	< 0.19	**0.2**	< 0.20	< 0.19	**0.019 J**	< 10	< 10	**16**	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	**0.082**	< 0.050	< 0.050	< 0.20	< 0.19	**0.23**	**0.57**	**0.65**	<0.19	**0.56**	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	10 U	**0.23**	**0.75**	**0.2**	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	**1.2 J**
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.52**	**1.29**	0.2 U	0.2 U	0.2 U	0.2 U	**0.07 B**	**0.83**	**0.78**	0.2 U	**0.098 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0073 B**
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	**0.0063 J**	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0824**	**0.0907**	**0.0935**	**0.123**	**0.12**	**0.098**	**0.036**	**0.076**	**0.025**	**0.021**	**0.027**	**0.023**	**0.022**	**0.019**	**0.0285**	**0.0330**	**0.149**	**0.0453**	--	0.2 U	**0.0568**	**0.056**	**0.054**	**0.06**	**0.067**	**0.068**	**0.067**	**0.068**	**0.069**	**0.073**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	**0.00021 J**	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	**0.0133**	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0019 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	**0.0091**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**123**	**95.7**	**34**	**33**	**33**	**53**	**51**	**42**	**43**	**55**	**52**
Chromium	0.1	mg/L	< 0.0100	**0.0127**	**0.0151**	< 0.0100	<0.010	**0.012**	**0.0088 J**	**0.26**	**0.015**	**0.012**	< 0.010	< 0.010	**0.0047 J**	**0.0069 J**	**0.0207**	**0.0257**	**0.0136**	**0.0668**	--	**0.0786**	**0.0277**	**0.098**	0.01 U	0.01 UJ	**0.0061 B**	**0.002 B**	**0.01**	**0.0093 B**	**0.0023 B**	**0.0035 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.011**	**0.0066 B**	**0.0038 B**	**0.0038 B**	**0.0047 B**	**0.0045 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0024 J**	**0.063**	**0.0026 J**	0.0021 J	<0.020	**0.021**	**0.0031 J**	**0.0023 J**	< 0.0100	< 0.010	< 0.010	**0.0157**	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0095 B**	**0.0042 B**	**0.0071 B**	**0.0068 B**	**0.0029 B**	**0.0015 B**
Cyanide	0.2	mg/L	0.02	**0.02**	< 0.010	**0.012**	**0.023**	**0.058**	**0.0096 J**	**0.029**	**0.014**	**0.02**	**0.033**	**0.013**	**0.0094 J**	**0.023**	**0.030**	< 0.010	< 0.010	**0.048**	--	**0.071**	**0.062**	**0.02**	**0.033**	**0.018**	**0.026**	**0.034**	**0.016**	**0.005 B**	**0.017**	**0.008 B**
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	**0.028**	< 0.0040	< 0.010 U	< 0.010	< 0.010	**0.0042 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	**0.0244**	--	**0.0241**	**0.0156**	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	**0.0086**	**0.0079**	0.005 U	**0.0037 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**61.7**	**48.2**	**20**	**18**	**20**	**23**	**23**	**21**	**21**	**24**	**24**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.0275**	**0.0432**	**0.0579**	**0.0568**	**0.073**	**0.073**	**0.023 J**	**0.066**	**0.032 J**	0.021 J	<0.040	**0.077**	**0.054**	**0.041**	**0.0546**	**0.0916**	**0.0349**	**0.0779**	--	**0.132**	**0.139**	**0.042**	0.04 U	**0.1**	**0.065**	**0.088**	**0.062**	**0.066**	**0.12**	**0.093**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.83**	**6.22**	**7.6**	**6.4**	**6.6**	**5.2**	**5**	**5.9**	**5.9**	**4.9**	**6.0**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0039 J**	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	--	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**84.1**	**78.9**	**69**	**69**	**66**	**74**	**73**	**59**	**59**	**72**	**72**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UWN	0.002 U	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	**0.016**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0023 B**	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.0747**	**0.0856**	**0.0985**	**0.142**	**0.12**	**0.14**	**0.030**	**0.11**	**0.042**	**0.044**	**0.052**	**0.065**	**0.055**	0.051	**0.0730**	**0.0907**	< 0.02	**0.111**	--	**0.133**	**0.197**	0.02 U	**0.046**	**0.07**	**0.055**	**0.035**	**0.041**	**0.04**	**0.034**	**0.037**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-21																																
			1/12/2015	7/15/2014	1/9/2014	7/11/2013	1/9/2013	7/24/2012	1/18/2012	7/5/2011	1/20/2011	7/14/2010	1/7/2010	7/23/2009	1/09 DUP	1/15/2009	7/21/2009	1/9/2008	1/08 DUP	07/21/2008	7/11/2007	2/13/2007	7/12/2006	1/10/2006	7/22/2005	1/18/2005	7/13/2004	1/24/2004	7/20/2003	7/03 DUP	1/16/2003	7/10/2002	1/21/2002	7/11/2001	1/18/2001
			Post-ISCO																						Pre-ISCO										
Field Parameters																																			
Conductivity	*	mS/cm	0.614	0.631	0.702	0.518	0.460	0.457	0.305	0.481	2.64	0.554	0.43	0.533	0.47	0.47	0.474	0.590	0.590	0.474	0.526	0.536	0.462	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.42	0.74	0.24	0.50	0.33	2.04	4.01	1.97	120.5	4.91	3.41	0.51	212.1	212.1	0.33	0.31	0.31	0.33	0.39	0.30	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	63.9	144	187.3	111.7	94.7	90	101.0	63.0	6.53	119.1	45.1	124.4	6.3	6.3	122.5	75.0	75.0	122.5	189.6	-28.2	58	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.06	6.39	6.36	6.08	6.32	6.23	6.58	6.52	0.511	6.59	7.03	6.3	0.501	0.501	6.26	6.39	6.39	6.26	6.30	6.42	6.32	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.3	25.21	17.32	25.09	23.10	30.0	20.62	29.44	19.87	28.19	18.22	26.58	21.84	21.84	27.94	22.96	22.96	27.94	25.72	22.37	23.78	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.97	2.14	0.32	1.04	1.79	1.0	0.69	2.69	0.85	3.12	0.65	3.31	1.34	1.34	2.29	0.32	0.32	2.29	0.57	0.13	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																			
Carbon Dioxide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.04 UJ	0.06	0.023 B	0.05 U	0.05 U	0.089	0.046 B
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.379	0.332	0.35	0.45	0.43	0.34	0.34	0.37	0.38	0.4	0.47 N	0.39
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																				
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 100	< 50	< 50	50 U	33 U	25 U	25 U	25 U	25 U	25 UR	25 UR	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	**0.39 J**	**0.49 J**	**0.36 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.0**	1.0 UR	1.0 U	1.0 U	**0.12 J**	**1.8 J**	**0.17 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UR	1.0 U	1.0 U	**0.77 J**	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UR	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UR	5.0 UR	5.0 U	**0.26 J**	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.92 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UR	1.0 UR	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	**18**	**18**	**49**	**150**	**130**	**86**	**13**	**110**	**100**	**130**	**160**	**87**	**70**	**64**	**62**	**100**	**96**	**62**	**110**	< 5	**170**	**110**	**180**	**140**	**140**	**120**	1.0 UR	**0.14**	**43**	**39**	**36**	**37**	**30**
Xylenes, total	2,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.0**	2.0 UR	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**--**	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	**0.024 J**	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.19	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.044	< 0.048	< 0.050	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.19	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.19	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	**1.4**	<0.19	**0.52**	< 0.098	< 0.11	< 0.11	< 0.20	**1.8**	< 0.20	**0.048 J**	**0.43 B**	**0.075 J**	< 10	< 10	0.075 J	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11 *	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.098	< 0.11	< 0.11	< 0.20	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 0.19	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**--**	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.058 B**	0.2 U	0.2 U	0.2 U	**0.029 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	<0.0500	<0.0500	< 0.010	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0854**	**0.0847**	**0.084**	**0.0759**	**0.066**	**0.063**	**0.035**	**0.062**	**0.072**	**0.073**	**0.081**	**0.07**	**0.072**	**0.072**	**0.07**	**0.0783**	**0.0756**	**0.07**	**0.0609**	**0.0656**	**0.073**	0.2 U	**0.0589**	**0.069**	**0.07**	**0.072**	**0.06**	**0.05**	**0.065**	**0.066**	**0.066**	**0.063**	**0.061**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00028 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0040	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	**0.00057 B**	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**29.4**	**31.6**	**33**	**34**	**37**	**30**	**30**	**33**	**32**	**33**	**33**	**33**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.010**	< 0.010	**0.022**	< 0.0012	< 0.0012	**0.028**	**0.2**	< 0.010	**0.0015 J**	< 0.010	**0.0037 J**	< 0.0100	< 0.0100	0.0037 J	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	**0.0021 B**	0.01 U
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0028 JB**	**0.0023 J**	< 0.020	< 0.020	**0.0028 J**	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.020	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 UN	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0068 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.0050	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0033 B**	0.005 U	**0.002 B**	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**20.4**	**21.1**	**22**	**22**	**24**	**19**	**20**	**22**	**22**	**23**	**24**	**24**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	**0.0021 J**	< 0.0200	< 0.0200	0.0021 J	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	1 U	1 U	1 U	**1**	**0.9**	**0.87 B**	**0.92 B**	**0.9 B**	**0.86 B**	**1.1**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.010	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40.8**	**47**	**46**	**49**	**47**	**44**	**44**	**46**	**49**	**44**	**45**	**46**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.0010	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0023 J**	**0.0019 J**	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0023 B**	**0.0027 B**	0.01 U	**0.0023 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.016 J**	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	0.02 UJ	0.020 U	0.02 U	0.02 U	**0.0091 B**	**0.013 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-22																													
			1/13/2015	7/14/2014	1/9/2014	7/8/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/18/2010	7/15/2010	1/5/2010	7/21/2009	07/09 DUP	1/13/2009	7/22/2008	1/8/2008	8/21/2007**	7/11/2007	2/15/2007	7/11/2006	1/15/2006	7/19/2005	7/13/2004	1/21/2004	7/15/2003	1/20/2003	7/11/2002	1/22/2002	7/10/2001	1/18/2001
			Post-ISCO																					Pre-ISCO								
Field Parameters																																
Conductivity	*	mS/cm	0.196	0.174	0.177	0.214	0.237	0.289	0.354	0.307	2.43	0.297	0.254	0.301	0.301	1.06	0.433	0.490	0.38	0.338	0.413	0.378	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.08	0.64	2.67	0.63	1.69	0.5	1.33	1.10	6.43	0.65	2.4	3.74	3.74	6.1	0.43	1.50	0.24	0.77	3.31	3.58	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-22.3	17.8	87.0	68.2	84.8	75.3	72.8	124.3	108	147	-13.9	143.5	143.5	120.8	159.4	101.1	56.9	162.9	162	209.3	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.13	6.69	6.39	6.28	6.42	6.23	6.31	5.69	0.366	6.09	6.5	6.43	6.43	6.43	0.377	6.09	6.18	6.15	6.15	6.24	6.21	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.5	23	18.71	22.98	14.01	26.6	20.32	23.74	17.99	22.84	16.39	25.77	25.77	18.01	22.91	21.79	24.02	24.07	18.93	23.45	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.35	0.87	8.97	5.25	5.32	7.92	1.01	108	8.4	4.05	25.6	7.26	7.26	4.6	5.64	1.99	2.72	6.13	2.60	3.47	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	59.7	69.2	117	117	40	52	780 B	680 B	710	--	610	410 *	690 *	600	750	< 1000	--	< 1000	--	140	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.196	0.643	0.25	0.17	0.19	0.1	0.12	0.073	0.2	0.033 B	0.54
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	0.082 JHF	--	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	--	0.33	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 U	0.0167	0.01 U	0.04	0.13	0.04 UJ	0.087	0.035	0.15	0.0081 B	0.038
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	180	<4	<4	1.2	0.65	< 0.29	0.50 J	0.33	--	1.1	0.29	0.25	0.29	0.13	2.2	--	13	0.23	2,400	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.63	< 0.25	0.85	0.28	0.93	1.1	0.74	0.90	3.8	--	4.3	5.4	5.4	2.7	12	1.9	--	1.6	3.0	2.3	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	8.02 H	8.04 H	6.18 H	7.24 H	6.4	4.8	1.2	1.5	1.3	--	1.5	1.4	1.7	1.1	1.2	3.1	--	5.0	4.6	1.4	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	24	2.6	26	20	31	52	64	54	62	--	47	47	47	64	66	99	--	66	63	60	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	--	< 50	50 U	10 U	25 U	25 U	25 U	**44**	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.2 J B** *	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	**0.51 J**	**0.28 J**	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(e,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.044	< 0.043	< 0.049	< 0.044	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**2.8**	< 0.50	**1.6**	< 0.50	< 0.22	< 0.097	< 0.095	< 0.11	**0.5**	< 0.19	< 0.19	< 0.19	< 0.19	0.10 J	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	**0.092**	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.097	< 0.095	< 0.11	< 0.098	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.742**	**0.335**	0.2 U	0.2 U	0.2 U	**0.11 B**	**0.051 B**	**0.22**	0.2 U	**0.32**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0300**	< 0.0200	**0.0322**	**0.0322**	**0.031**	**0.038**	**0.050**	**0.049**	**0.052**	**0.044**	**0.042**	**0.039**	**0.051**	**0.042**	**0.05**	**0.0712**	--	**0.0767**	**0.0505**	**0.0563**	0.2 U	**0.0656**	**0.065**	**0.065**	**0.05**	**0.056**	**0.058**	**0.061**	**0.053**	**0.056**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	**0.0156**	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**22**	**26.8**	**27**	**27**	**21**	**22**	**22**	**23**	**23**	**22**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	**0.0028 J**	**0.0027 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.0054 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0017 B**	**0.0014 B**	**0.00093 B**	0.02 U	**0.0013 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.015**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	**0.0025 B**	0.005 U	0.005 U	0.005 U	0.005 U
Maonesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**25.7**	**32.4**	**32**	**33**	**27**	**28**	**30**	**30**	**30**	**29**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00013 B**	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0023 J**	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	1 U	1 U	**0.5**	**0.24 B**	**0.24 B**	**0.28 B**	**0.27 B**	**0.29 B**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0063 B**	0.01 U	0.01 U	**0.0063 B**	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**31**	**45.5**	**41**	**40**	**47**	**40**	**42**	**39**	**41**	**43**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	**0.00026 J**	**0.00028 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	**0.0046 J**	**0.0038 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	**0.0140**	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	**0.144**	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	**0.010 J**	**0.014 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	**0.0353**	< 0.02	0.02 U	0.02 U	**0.117 J**	0.02 U	**0.021**	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
**: Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-24		MW-25																		
		Sample Date	7/15/2010	10/4/2006	7/22/2009	1/13/2009	7/16/2008	1/8/2008	7/10/2007	2/14/2007	7/13/2006	1/11/2006	7/19/2005	1/19/2005	7/14/2004	1/21/2004	7/17/2003	1/20/2003	7/17/2002	1/22/2002	7/13/2001	7/13/2001	1/23/2001
		Unit	Post-ISCO		Post-ISCO								Pre-ISCO										
Field Parameters																							
Conductivity	*	mS/cm	0.501	0.52	0.820	4.52	0.848	0.839	0.731	0.89	0.83	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	3.82	0.13	1.31	5.82	0.45	0.39	0.32	1.48	0.18	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	169	25.2	-274.1	130.7	6.9	42.1	69.3	54.3	51.8	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.36	6.34	5.84	0.437	5.71	5.79	5.64	5.71	5.80	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	23.48	24.05	22.61	17.94	22.26	22.04	22.45	18.14	22.14	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	8.79	0.47	1.64	1.7	2.79	0.95	0.00	0.73	3.16	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																							
Carbon Dioxide	*	µg/L	850 JB	--	1,700 *	1,100	1,700	< 1000	< 1000	--	1,,500	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	2.97	1.82	2.65	2.4	2.4	4.9	2.1	2.6	2.6	3.9	3.0	3.0	2.9
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.10 HF	--	2.3 HF	0.62 HF	3.9	4.84	4.22	2.78	2.46	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	1.13	0.756	0.825	0.77	0.94	0.99	1.1	0.94	1.1	1.1	0.97	0.98	0.83
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	0.965	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 0.19	--	3.1	0.87	1.2	1.6	2.5	1.9	2	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	5.8	--	< 1.1	0.077	< 0.50	< 0.25	0.37	< 0.25	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	1.6	--	1.1	1.1	1.1	1.9	2.5	2.1	3	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	83	--	100	38	110	140	120	120	170	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																							
Acetone	4,000	µg/L	< 100	50	< 100	< 100	< 100	< 50	< 50	< 50 U	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**
Carbon Disulfide	4,000	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	5	< 5.0	< 5.0	**0.5 J**	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.66 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.37 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																							
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**1,500**
Acenaphthene	2,000	µg/L	< 0.20	10	< 0.19	< 0.19	**0.062 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**140**
Acenaphthylene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	**0.28**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**6.2 J**
Anthracene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**23 J**
Benz(a)anthracene	0.1	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(a)pyrene	0.2	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.20	0.1	< 0.19	< 0.19	< 0.19	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(g,h,i)perylene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(k)fluoranthene	10	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Chrysene	0.2	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.20	0.1	< 0.19	< 0.19	< 0.19	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	0.001 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**40 J**
Fluoranthene	1,000	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**13 J**
Fluorene	1,000	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**76**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.20	0.05	< 0.19	< 0.19	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Naphthalene	20	µg/L	< 0.20	10	< 0.19	**0.089 J**	**3.1**	< 10	< 10	< 10	10 U	**0.24**	**1.3**	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**10,000 D**
Phenanthrene	10	µg/L	< 0.20	10	< 0.19	**0.031 J**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**67**
Pyrene	1,000	µg/L	< 0.20	10	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**14 J**
Inorganic Compounds																							
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	0.2 U	**0.266**	0.2 U	0.2 U	**0.66**	0.2 U	0.2 U	**0.04 B**	0.2 U	**0.047 B**	**0.048 B**	**0.039 B**
Antimony	0.01	mg/L	< 0.020	0.02	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	0.05	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0036 B**	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.073**	**0.0821**	**0.18**	**0.16**	**0.21**	**0.166**	**0.214**	**0.224**	**0.198**	**0.231**	**0.238**	**0.23**	**0.26**	**0.26**	**0.29**	**0.32**	**0.33**	**0.35**	**0.32**	**0.33**	**0.31**
Beryllium	0.004	mg/L	< 0.0040	0.01	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	**40.1**	**45.5**	**38**	**44**	**47**	**51**	**50**	**56**	**56**	**53**	**53**	**47**
Chromium	0.1	mg/L	< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	**0.0107**	0.01 U	**0.011**	**0.013**	**0.015**	0.01 U	**0.014**	**0.017**	**0.016**	**0.016**	**0.016**	**0.015**
Copper	1.3	mg/L	< 0.020	0.01	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	**0.0015 B**	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	0.01	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	**36.1**	**40.1**	**34**	**40**	**42**	**52**	**45**	**50**	**51**	**48**	**48**	**43**
Mercury	0.002	mg/L	< 0.00020	0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	0.02	< 0.040	**0.0016 J**	**0.0120 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0063 B**	**0.0082 B**	**0.0074 B**	**0.0061 B**	**0.0068 B**	**0.0066 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	5 U	**1.68**	**1.7**	**2**	**2.1**	**2.4**	**2.6**	**2.9**	**2.8**	**2.6**	**2.7**	**2.3**
Selenium	0.05	mg/L	< 0.020	0.02	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	**90.2**	**114**	**85**	**96**	**86**	**95**	**110**	**110**	**89**	**89**	**89**	**78**
Thallium	0.002	mg/L	< 0.0010	0.001	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	0.02	< 0.020	**0.012 J**	**0.0100 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.08**	0.02 U	**0.0064 B**	**0.0089 B**	**0.0092 B**	**0.01 B**	**0.0079 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-201		MW-202DR												
		Sample Date	10/4/2006	7/9/2002	1/13/2015	7/17/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/16/2012	7/5/2011	01/11 DUP	1/17/2011	7/13/2010	1/5/2010	2/15/2007
		Unit	Post-ISCO	Pre-ISCO	Post-ISCO												
Field Parameters																	
Conductivity	*	mS/cm	670	--	0.524	0.518	0.420	0.549	0.557	0.53	0.642	0.641	2.26	2.26	0.582	0.716	1.542
Dissolved Oxygen (YSI)	*	mg/L	0.16	--	1.29	0.2	4.17	0.23	0.70	0.02	0.82	1.20	6.43	6.43	2.44	8.29	12.98
Oxidation Reduction Potential	*	mV	18.6	--	-16.1	48.1	61.4	101.6	126.0	92.5	75.9	136.8	126.5	126.5	122.3	12.3	138.7
pH	*	SU	6.27	--	6.13	6.33	6.32	5.91	6.31	6.08	6.20	6.22	0.537	0.537	6.13	6.1	5.95
Temperature	*	Celsius	23.14	--	16.5	21.6	15.02	23.67	19.36	23.7	19.70	23.09	16.83	16.83	22.25	18.92	19.48
Turbidity	*	NTU	0.99	--	1.74	3.98	1.51	9.38	7.90	8.53	4.50	60.9	9.24	9.24	8.54	8.02	1.76
Monitored Natural Attenuation Parameters																	
Carbon Dioxide	*	µg/L	--	--	196	234	324	219	100	120	1,300 B	1,500 B	1,000 *	1,100 *	1,300	1,500	--
Iron	*	mg/L	--	**0.28**	**--**	**--**	**--**	**--**	**--**	**--**	--	--	--	--	**--**	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.1
Manganese, Total	*	mg/L	--	**1.5**	--	**--**	**--**	**--**	**--**	**--**	--	--	--	--	**--**	--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	< 4	< 4	<4	<4	< 0.58	76	< 0.29	0.36 J	0.20	< 0.19	0.22	0.33	4.5
Nitrate	*	mg/L	--	--	0.31	< 0.25	<0.25	0.25	0.82	0.82	0.24 J	0.25	0.84 J	0.90 J	0.63 JH	< 1.1	< 0.25
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	8.27 H	5.25 H	7.58 H	6.92 H	6.3	6.3	1.4	1.6	1.5	1.3	1.4	1.7	36
Sulfate	*	mg/L	--	--	56	61	64	67	68	72	75	80	79	78	76	98	340
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																	
Acetone	4,000	µg/L	< 50	< 25	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 50
Benzene	5	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5
Carbon Disulfide	4,000	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5
Ethylbenzene	700	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 1.0	< 5.0	< 5.0	< 5
Methylene Chloride	5	µg/L	< 5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 0.11	< 5.0	< 5.0	< 5
Toluene	1,000	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5
Trichloroethylene	5	µg/L	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5
Xylenes, total	2,000	µg/L	< 5	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5
Semivolatile Organic Compounds																	
2-Methylnaphthalene	*	µg/L	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	2,000	µg/L	< 10	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Acenaphthylene	10	µg/L	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Anthracene	10	µg/L	< 10	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 10	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Benzo(k)fluoranthene	10	µg/L	< 10	< 10	< 0.050	< 0.050	**0.060**	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Chrysene	0.2	µg/L	< 0.05	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.044	< 0.043	< 0.048	< 0.048	< 0.19	< 0.19	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.1
Dibenzofuran	1	µg/L	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	1,000	µg/L	< 10	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Fluorene	1,000	µg/L	< 10	< 10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 10	< 0.050	< 0.050	**0.065**	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 0.05
Naphthalene	20	µg/L	< 10	< 10	**2.7**	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	**1.2**	< 0.095	< 1.0	**0.24**	< 0.19	< 0.19	< 10
Phenanthrene	10	µg/L	< 10	< 10	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Pyrene	1,000	µg/L	< 10	< 10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.097	< 0.095	< 0.11	< 0.11	< 0.19	< 0.19	< 10
Inorganic Compounds																	
Aluminum (fume or dust)	*	mg/L	--	**0.042 J**	**--**	**--**	--	**--**	**--**	**--**	--	--	**--**	**--**	--	--	--
Antimony	0.01	mg/L	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.02
Arsenic	0.05	mg/L	< 0.05	< 0.01	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.05
Barium	2	mg/L	**0.0647**	**0.084**	**0.0536**	**0.0549**	**0.0541**	**0.0519**	**0.050**	**0.055**	**0.062**	**0.062**	**0.061**	**0.059**	**0.054**	**0.05**	**0.104**
Beryllium	0.004	mg/L	< 0.01	< 0.004	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0011	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.005
Calcium metal	*	mg/L	--	**49**	**--**	**--**	--	**--**	**--**	**--**	--	--	--	--	--	--	--
Chromium	0.1	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0049 J**	**0.0041 J**	**0.0038 J**	**0.0037 J**	**0.0015 J**	< 0.010	< 0.010
Cobalt	*	mg/L	--	**0.0099 J**	**--**	**--**	--	**--**	**--**	**--**	--	**--**	--	--	--	--	--
Copper	1.3	mg/L	< 0.01	< 0.0016	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0058 J**	< 0.0019	< 0.0019	< 0.0019	**0.0030 J**	< 0.020	< 0.010
Cyanide	0.2	mg/L	< 0.01	**0.12**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.016**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.01	< 0.005	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010
Magnesium	*	mg/L	--	**39**	**--**	**--**	**--**	**--**	**--**	**--**	--	--	--	--	--	--	--
Mercury	0.002	mg/L	< 0.0002	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.0002
Nickel	0.1	mg/L	< 0.02	**0.0049 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.013 J**	**0.0031 J**	< 0.0023	< 0.0023	**0.0071 J**	< 0.040	< 0.02
Potassium	*	mg/L	--	**1.1**	**--**	**--**	--	**--**	**--**	**--**	--	**--**	--	--	--	--	--
Selenium	0.05	mg/L	< 0.02	< 0.01	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	**0.0079 J**	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.02
Sodium	*	mg/L	--	**100**	**--**	**--**	--	**--**	**--**	**--**	--	**--**	--	--	**--**	--	--
Thallium	0.002	mg/L	< 0.001	< 0.002	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0027 J**	**0.0049 J**	**0.0028 J**	< 0.0024	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	**0.018 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.038**	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-203																									
		Sample Date	1/14/2015	7/15/2014	1/14/2014	7/10/2013	1/10/2013	7/24/2012	1/23/2012	7/5/2011	1/18/2011	7/13/2010	1/12/2010	7/22/2009	1/13/2009	7/23/2008	1/10/2008	8/21/2007**	7/12/2007	2/14/2007	7/13/2006	1/16/2006	7/22/2005	7/16/2004	1/24/2004	7/16/2003	7/17/2002	1/21/2002	1/17/2001
		Unit	Post-ISCO																				Pre-ISCO						
Field Parameters																													
Conductivity	*	mS/cm	0.224	0.454	0.339	0.475	0.343	0.570	0.505	0.550	1.55	0.475	0.564	0.882	16.94	0.871	0.517	0.759	0.818	0.94	0.863	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.72	0.57	0.58	0.41	5.39	0.51	3.42	1.67	6.20	1.98	15.27	19.69	5.68	0.97	3.20	3.9	10.34	11.99	21.49	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	69.3	-99.8	144.9	-80.2	87.9	81.6	13.9	102.0	7.0	111.1	35.7	189	377.4	140.1	59.2	161.3	152.6	137.2	149	--	--	--	--	--	--	--	--
pH	*	SU	6.28	6.23	6.64	6.07	6.43	5.45	6.20	6.18	0.58	6.23	7.07	5.98	0.799	5.82	6.10	5.77	5.77	5.93	5.66	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.6	22.92	19.11	20.21	18.30	26.92	16.54	21.85	19.41	23.63	16.1	23.18	19.61	22.18	20.90	23.34	21.77	19.01	21.35	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.70	5.97	0.77	0.54	7.22	0.98	1.96	4.75	2.19	6.67	7.18	3.01	3.2	1.54	0.58	1.12	1.48	1.09	0.58	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																													
Carbon Dioxide	*	µg/L	81.2	147	219	146	110	92	2,000 B	1,200 B	1,300	960	1,500	2,300 *	1,700	2,300	< 1000	--	< 1000	--	2,900	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.361	0.903	0.068	0.087	0.09	0.13	0.039 B	0.089
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	0.802	0.28 HF	< 0.10 HF	0.45 HF	< 0.025 HF	0.73 HF	0.098 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	--	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.39	1.52	1.55	0.57	0.54	0.54	1.7	1.7	1.5
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.15	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	270	<4	9	5.8	4.2	10	0.57 J	19	0.47	2.1	0.31	1.1	0.54	2.6	--	2.9	4.5	5.8	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.51	< 0.25	0.32	0.49	< 0.25	< 0.25	0.10 J	0.30	0.81 J	5.6	3	4.7	2.3	5.7	2.9	--	2.9	3	3.1	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.9	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.45	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	9.08 H	7.17 H	6.34 H	7.55 H	6.9	6.9	1.2	2.0	1.4	1.2	1.8	1.6	1.5	1.0	2.0	--	12	11	18	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	13	58	59	62	80	61	69	67	67	57	86	120	120	90	140	--	95	96	120	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--
Volatile Organic Compounds																													
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	--	< 50	50 U	10 U	**420**	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	**2.7**	**62**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.19 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.49 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	**44**	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	**15**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																													
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0 U	**0.44**	2.0 U	**0.24**	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	**0.075**	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	--	< 0.1	< 0.1	0.1 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	**0.12**	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	**0.068**	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.046	< 0.055	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	**0.13**	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	--	< 0.1	< 0.1	0.1 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.13**	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	--	< 0.05	< 0.05	0.05 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.050	< 0.50	< 0.50	< 0.50	<0.19	**2.5**	**0.58**	**0.52**	< 0.11	< 0.19	**0.21**	< 0.19	< 0.19	**0.09 J**	< 10	--	< 10	< 10	10 U	**1.1**	**6.7**	2.0 U	**1.4**	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.22	< 0.10	< 0.12	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	2.0 U	2.0 U	2.0 U	2.0 U	10 UJ	10 U	10 U	10 U
Inorganic Compounds																													
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.631**	**4.81**	0.2 U	0.2 U	0.2 U	**0.032 B**	0.2 U	0.2 U
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0060 B**
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0046 J**	**0.0047 J**	**0.0047 J**	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0758**	**0.0499**	**0.0602**	**0.0757**	**0.13**	**0.068**	**0.047**	**0.059**	**0.078**	**0.066**	**0.066**	**0.072**	**0.056**	**0.083**	**0.0542**	--	**0.0516**	**0.0311**	**0.0415**	0.2 U	**0.0139**	**0.14**	**0.14**	**0.14**	**0.18**	**0.17**	**0.17**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00025 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0019 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	**0.0045 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40.5**	**41.7**	**50**	**52**	**48**	**63**	**59**	**56**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0040 J**	**0.013**	**0.0079 J**	**0.0042 J**	< 0.010	< 0.010	0.013	**0.0055 J**	< 0.0100	--	**0.0117**	< 0.010	0.01 U	0.005 U	**0.101**	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0626**	**0.0917**	0.01 U	0.01 U	0.01 UJ	**0.015**	**0.014**	**0.013**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0022 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0090 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0029 J**	< 0.0050	< 0.0100	--	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	**0.0016 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**34.3**	**34.2**	**43**	**43**	**43**	**53**	**51**	**49**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0070 J**	**0.0036 J**	**0.0068 J**	**0.0092 J**	< 0.040	< 0.040	**0.0021 J**	**0.0071 J**	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	**0.0066 B**	**0.0054 B**	**0.0063 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**5.34**	**1.3**	**1.2**	**1.3**	**1.6**	**1.5**	**1.5**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	**0.0099 J**	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0066 J**	**0.0097 J**	< 0.0200	--	< 0.02	< 0.02	0.02 U	**0.0097**	**0.019**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**81.8**	**75.5**	**150**	**140**	**130**	**160**	**130**	**130**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.002 U	0.002 UWN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	**0.0607**	**0.0135**	**0.0374**	**0.0155**	**0.016**	< 0.010	**0.0075 J**	**0.019**	**0.012**	**0.019**	**0.028**	**0.023**	**0.017**	**0.0110 J**	**0.0194**	--	**0.0163**	**0.0246**	**0.0319**	**0.0601**	**0.484**	0.01 U	0.01 U	0.01 UJ	**0.0052 B**	**0.0034 B**	**0.0034 B**
Zinc	2	mg/L	**0.0312**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.016 J**	**0.019 J**	**0.029**	**0.011 J**	< 0.020	< 0.020	**0.011 J**	0.011	< 0.0200	--	< 0.02	< 0.02	0.02 U	**0.0475**	**0.079**	0.02 U	0.02 U	**0.03**	**0.015 B**	**0.017 B**	**0.015 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	7/16/2014	1/9/2014	1/10/2013	7/26/2012	1/25/2012	7/7/2011	1/20/2011	7/13/2010	1/12/2010	7/29/2009	1/21/2009	7/23/2008	1/10/2008	1/17/2006	7/22/2005	7/16/2004	1/24/2004	7/18/2003	4/4/2002	1/22/2002	01/02 DUP	7/17/2001	07/01 DUP	1/23/2001
																	Pre-ISCO									
Field Parameters																										
Conductivity	*	mS/cm	0.568	0.455	0.464	0.202	0.417	0.463	0.85	0.41	0.486	0.548	0.33	0.577	0.497	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.23	0.39	0.36	0.25	1.04	0.28	5.44	0.23	1.37	1.18	5.96	0.61	1.03	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-107.1	-103.4	18.1	-29.2	-57.8	-59.6	57.3	-109.7	8.15	-36.8	-27	-29.8	-60.1	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.43	6.25	6.32	6.21	6.27	6.60	0.382	5.95	6.15	6.43	0.426	6.08	5.79	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	22.24	18.74	21.13	21.81	20.56	24.56	17.03	21.64	15.94	23.08	19.82	26.48	22.91	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	11.1	7.53	6.42	10.5	9.26	26.6	11.4	3.1	9.3	8	4.2	8.76	2.29	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																											
Carbon Dioxide	*	µg/L	342	332	140	140	2,800 B	380 B	2,300	2,600	1,900	2,100 *	2,300	3,000	< 1000	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	54.8	34.2	0.34	0.46	0.19	--	1.1	1.2	0.36	0.52	0.49
Iron, as Ferrous (Fe+2)	*	mg/L	3.78	0.949	0.35 HF	0.29 HF	1.7 HF	1.7 HF	0.045 J HF	1.9 HF	2.0 HF	0.33 HF	< 0.10 HF	0.50 HF	0.19	5.87	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	2.46	3.8	1.7	1.7	1.6	--	1.5	1.6	1.4	1.4	1.5
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	180	290	380	2000	230	260	250	130	520	310	250	300	490	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	<0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.36	<1.1	< 1.1	< 1.1	< 0.050	0.20	< 0.25	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	6 H	6.82 H	5.1	2.4	1.6	1.3	1.2	1.4	1.3	2.1	1.3	0.99	1.9	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	79	7.8	< 5.0	< 5.0	3.2 J	< 2.6	6.5	23	16	24	26	41	86	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																											
Acetone	4,000	µg/L	< 50	<50	< 100	< 100	**5.7 J**	**21 J**	< 500	< 1000	< 10000	< 2000	< 2000	< 5000	**150**	**2,000**	**5,400**	< 2,500	< 2,500	< 1,300	--	< 1,200	< 1,200	< 620	< 1,200	< 1,200
Benzene	5	µg/L	**1,100**	**3,100**	**4,300 D**	**3,300 D**	**6,600**	**12,000**	**8,900**	**5,600**	**12,000**	**7,500 D**	**2,700**	**5,500**	**8,300**	**6,500**	**5,500**	**4,100**	**3,500**	**3,300**	**6,400**	**6,400**	**6,000**	**5,500 D**	**6,500**	**7,700**
Carbon Disulfide	4,000	µg/L	< 5.0	<5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 60	< 500	< 500	< 100	< 100	< 250	< 5.0	< 200	< 200	< 100	< 100	< 50	--	< 50	< 50	< 50	< 50	< 50
Ethylbenzene	700	µg/L	**170**	**360**	**400 D**	**490 D**	**660**	**510 J**	**490 J**	**220**	**750**	**440**	< 100	200 J	**160**	< 200	**130**	**180**	**260**	**240**	**280**	**350**	**360**	**450**	**610**	**470**
Methylene Chloride	5	µg/L	< 5.0	<5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 100	< 50	< 500	< 100	260	< 250	< 5.0	< 200	< 100	< 500	< 500	< 250	< 250	< 250	< 250	< 0.12	< 250	**55 JB**
Toluene	1,000	µg/L	**77**	**99**	**940 D**	**1,100 D**	**1,500**	**4,300**	**1,400**	**340**	**2,200**	**1,300**	**650**	**1,600**	**2,800**	**5,100**	**4,300**	**2,500**	**2,400**	**2,400**	**5,800**	**6,700**	**6,400**	**6,700 D**	**8,400**	**8,100**
Trichloroethylene	5	µg/L	< 5.0	<5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 13	< 50	< 500	< 100	< 100	< 250	< 5.0	< 200	< 200	< 100	< 100	< 50	< 50	< 50	< 50	< 0.025	< 50	< 50
Xylenes, total	2,000	µg/L	**220**	**250**	**500 D**	**640 D**	**640**	**1,000**	**680**	**520**	**1,100**	**940**	**790**	**970**	**1,100**	**1,600**	**1,100**	**1,800**	**2,200**	**2,300**	--	**3,400**	**3,500**	**4,600**	**6,100**	**4,600**
Semivolatile Organic Compounds																											
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**1,200**	**2,500**	**760**	**1,200**	**820**	--	**1,100**	**1,200**	**1,400 D**	**1,200 D**	**1,200**
Acenaphthene	2,000	µg/L	**12**	**14**	<22	**11**	**11**	**2.6**	**6.8**	**5.2**	**3.1**	< 10 *	< 38	**2.5 J**	< 10	< 27	< 30	< 200	< 160	**20**	**42 J**	**23 J**	**23 J**	**27 J**	**26 J**	**26 J**
Acenaphthylene	10	µg/L	**7.0**	**6.7**	<22	**6.9**	**14**	**2.6**	**18**	**11**	**11**	**11**	**9.5 J**	**6.3**	**22**	**65**	**490**	**200**	**190**	**300**	**580**	**350**	**400**	**460**	**430**	**380**
Anthracene	10	µg/L	**4.3**	**3.7**	<22	< 3.9	**4.3**	**2.9**	**4.7**	**3.6**	**4.2**	< 10	< 38	**3.2 J**	**10**	< 27	**88**	< 200	**15**	< 10	**38 J**	**10 J**	**10 J**	**15 J**	**18 J**	**15 J**
Benz(a)anthracene	0.1	µg/L	**2.5**	**1.3**	<22	< 3.9	**1.5 J**	**2.1**	**1.7 J**	**1.2 J**	**3.4**	< 10	< 38	**0.52 J**	**0.78**	< 27	**86**	< 200	**3.8**	< 10	**20 J**	< 200	< 100	**6.1 J**	**9.3 J**	**3.2 J**
Benzo(a)pyrene	0.2	µg/L	**1.8**	**0.73**	<22	< 3.9	< 1.1	**1.4**	**1.1 J**	< 1.9	**2.9**	< 10	< 38	< 3.9	**0.16**	< 27	**55**	< 200	**4.2**	< 10	**14 J**	< 200	< 100	**3.3 J**	**5.6 J**	< 50
Benzo(b)fluoranthene	0.2	µg/L	**1.7**	**0.59**	<22	< 3.9	< 1.1 *	**0.86**	< 1.0	< 1.9 *	**2**	< 10	< 38	< 3.9	**0.20**	< 27	**49**	< 200	**4**	< 10	**10 J**	< 200	< 100	**2.7 J**	**0.43 J**	< 50
Benzo(g,h,i)perylene	10	µg/L	**0.76**	**0.27**	<22	< 3.9	< 1.1	**0.41**	< 1.0	< 1.9	<2.0	< 10	< 38	< 3.9	< 10	< 27	**34**	< 200	**1.5**	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Benzo(k)fluoranthene	10	µg/L	**0.59**	**0.2**	<22	< 3.9	< 1.1	**1.0**	< 1.0	< 1.9	<2.0	< 10	< 38	< 3.9	< 10	< 27	**32**	< 200	< 0.2	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Chrysene	0.2	µg/L	**2**	**0.9**	<22	< 3.9	**1.4 J**	**1.7**	**1.6 J**	**0.97 J**	**2.6**	< 10	< 38	< 3.9	**0.62**	< 27	**85**	< 200	**3.4**	< 10	**19 J**	< 200	< 100	**5.8 J**	**9.1 J**	**3.3 J**
Dibenzo(a,h)anthracene	0.3	µg/L	**0.19**	<0.10	<22	< 3.9	< 1.1	**0.18 J**	< 1.0	< 1.9	< 2.0	< 10	< 38	< 3.9	< 0.10	< 27	< 30	< 200	< 0.2	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	< 130	**50**	< 200	< 160	**12**	--	**14 J**	**16 J**	**17 J**	**17 J**	**18 J**
Fluoranthene	1,000	µg/L	**5.6**	**4.3**	<22	< 3.9	**6.2**	**3.5**	**6.8**	**4.4**	**8.5**	< 10	**3.7 J**	**3.8 J**	< 10	**98**	**200**	< 200	**13**	< 10	**43 J**	< 200	**5.1 J**	**14 J**	**20 J**	**11 J**
Fluorene	1,000	µg/L	**31**	**38**	**33**	**47**	**68**	**38**	**75**	**46**	**29**	**48**	**21 J**	10	**26**	**97**	**260**	< 200	< 160	**51**	**120**	**58 J**	**61 J**	**76**	**76**	**90**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.65**	**0.24**	<22	< 3.9	< 1.1	**0.32**	< 1.0	< 1.9	< 2.0	< 10	< 38	< 3.9	0.11	< 27	**44**	< 200	**1.2**	< 10	< 100	< 200	< 100	< 50	< 50	< 50
Naphthalene	20	µg/L	**390**	**1,300**	**1,400 D**	**2,300**	**600 D**	**0.53**	**3,800**	**1,300**	**1,400**	**1,900 B**	**2,200**	**2,000**	**2,900**	**5,500**	**17,000**	**5,700**	**8,800**	**12,000**	**7,700 D**	**13,000 D**	**15,000 D**	**17,000 D**	**14,000 D**	**12,000 D**
Phenanthrene	10	µg/L	**38**	**41**	**30**	**40**	**56**	**17**	**46 ***	**35**	**22**	**17**	**13 J**	**28**	**64**	**300**	**580**	< 200	< 160	**50**	**210**	**69 J**	**71 J**	**91**	**110**	**90**
Pyrene	1,000	µg/L	**7.2**	**5**	<22	**4.6**	**7.4**	**7.7**	**8.8**	6	**10**	< 10	**5.6 J**	**3.9**	< 10	**120**	**220**	< 200	**14**	< 10	**69 J**	< 200	**6.9 J**	**20 J**	**31 J**	**14 J**
Inorganic Compounds																											
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**29.6**	**115**	< 0.2	< 0.2	< 0.2	--	**0.041 B**	**0.062 B**	**0.21 N**	**0.43 N**	**0.21**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.01	< 0.06	< 0.02	< 0.02	< 0.02	--	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	**0.0059 J**	< 0.020	< 0.020	**0.0063 J**	< 0.010	<0.0500	**0.0195**	**0.0266**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Barium	2	mg/L	< 0.0200	<0.0200	< 0.010	< 0.010	**0.0078 J**	**0.020**	**0.013**	**0.012**	< 0.010	< 0.010	**0.0055 J**	**0.0097 J**	< 0.0200	< 0.2	**0.075**	**0.14**	**0.14**	**0.13**	--	**0.11**	**0.11**	**0.12**	**0.12**	**0.13**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00042 JB**	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	**0.0074**	**0.0233**	< 0.004	< 0.004	< 0.004	--	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**43**	**65.7**	**63**	**65**	**60**	--	**53**	**54**	**51**	**52**	**54**
Chromium	0.1	mg/L	**0.0133**	< 0.0100	< 0.010	< 0.010	**0.0014 J**	**0.0035 J**	**0.0035 J**	**0.0043 J**	< 0.010	< 0.010	**0.0033 JB**	**0.0027 J**	< 0.0100	**0.178**	**0.494**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.314**	**0.607**	< 0.01	< 0.01	< 0.01	--	**0.0054 B**	**0.0061 B**	**0.0047 B**	**0.0054 B**	**0.0060 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0033 J**	**0.0050 JB**	**0.0024 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	**0.0365**	**0.212**	< 0.02	< 0.02	< 0.02	--	< 0.02	< 0.02	< 0.02	< 0.02	**0.0013 B**
Cyanide	0.2	mg/L	**0.012**	< 0.010	<0.010	**0.012**	**0.012**	**0.014**	**0.020**	**0.013**	**0.025**	**0.033**	**0.03**	**0.0084 J**	**0.023**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.015	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	**0.0053 J**	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.003	**0.0293**	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**38.9**	**58.2**	**54**	**55**	**58**	--	**47**	**49**	**46**	**46**	**49**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0030 J**	**0.0059 J**	**0.0060 J**	**0.0096 J**	< 0.040	< 0.040	**0.029 J**	**0.0300 J**	< 0.0200	**0.196**	**0.385**	< 0.04	< 0.04	< 0.04	--	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.95**	**14**	**1.7**	**1.5**	**1.2**	--	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	**0.0102**	**0.0227**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.6**	**26.9**	**97**	**87**	**79**	--	**55**	**56**	**67**	**68**	**66**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 0.001	< 0.001	< 0.002	< 0.001	< 0.002	--	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	**0.235**	**0.75**	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.030**	**0.030**	**0.022**	< 0.020	< 0.020	**0.022**	< 0.020	< 0.0200	**0.38**	**0.992**	< 0.02	< 0.02	**0.05**	--	**0.009 B**	**0.011 B**	**0.01 B**	**0.0076 B**	**0.02 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
** - Not sampled due to DNAPL
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-206																													
			Post-ISCO																				Pre-ISCO									
		1/14/2015	7/16/2014	1/14/2014	7/10/2013	1/10/2013	7/26/2012	1/23/2012	7/6/2011	1/19/2011	7/14/2010	1/6/2010	7/28/2009	07/09 DUP	1/15/2009	7/22/2008	1/8/2008	8/21/2007**	08/07 DUP	7/11/2007	2/15/2007	7/13/2006	1/14/2006	7/21/2005	1/19/2005	7/14/2004	1/24/2004	1/17/2003	7/10/2002	4/3/2002	1/21/2002	7/12/2001	1/19/2001
Field Parameters																																
Conductivity	*	mS/cm	0.711	0.66	0.637	0.583	0.536	5.810	0.585	0.607	14.56	0.696	0.664	0.755	0.755	5.16	0.602	0.568	0.342	--	0.497	0.456	0.377	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	7.73	3.29	3.82	1.91	3.17	2.48	9.59	5.80	9.05	4.27	21.57	9.57	9.57	6.5	2.67	3.05	5.44	--	5.42	0.99	0.19	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	42.6	-45.7	-46.2	-39.1	-39.2	-9.0	13.2	-21.1	175	132	132	12.7	145.1	145.1	-30.3	-158.4	-89.2	-50.7	--	15.1	-31.9	-20.4	--	--	--	--	--	--	--	--	--	--
pH	*	SU	8.29	7.09	7.59	6.58	6.55	6.43	9.37	6.98	0.643	7.25	10.24	7.37	7.37	0.78	8.41	7.61	9.79	--	8.42	6.13	6.14	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	12.40	24.26	19.70	20.61	23.55	30.20	16.03	22.39	19.63	24.18	16.34	30.78	30.78	19.9	25.03	21.72	23.36	--	22.18	17.79	23.35	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	8.75	249	23.20	9.72	9.96	7	1.68	5.97	15.6	4.93	3.85	18	18	9.9	10.8	14.5	29.8	--	72.3	0.62	3.23	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	319	296	317	268	76	62	73 B	720 B	33 J	710 B	< 50	400 *	380 *	87	32 J	< 1000	--	--	< 1000	--	120	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.64	11.2	7.35	9.9	7.5	11	23	11	--	12	9.4	11 N
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	0.923	1.96	0.352	0.83 HF	0.56 HF	0.037 J HF	< 0.025 HF	0.044 JHF	0.081 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	--	--	0.59	24.8	8.6	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.402	0.382	0.416	0.39	0.47	0.39	0.49	0.52	--	0.49	0.56	0.51
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.354	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	7	330	340	580	150	82	47	140	41	75	49	370	< 0.19	700	380	1,300	--	--	680	1,000	450	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.25	0.14 J	0.085 J	1.2	0.87 J	4.2	3.4	3.7	1.1	< 0.50	< 12	--	--	< 0.25	< 0.25	0.25 U	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	9.41 H	6.32 H	7.02 H	7.91 H	7.0	6.8	1.7	1.7	1.9	1.6	2.0	1.6	1.6	2.1	1.3	3.8	--	--	7.0	1.7	2.7	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	6.8	4.6	7.2	4.8	5.6	5.6	7.6	9.2	14	12	17	23	22	24	7.1	< 50	--	--	6.5	4.8	5.3	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**9.7 J**	< 100	< 100	< 100	**57 J**	**15.0 J**	< 50	< 50	< 50	--	< 50	< 50	10 U	25 U	25 U	25 U	25 U	25 U	25 U	--	25 U	25 U	25 U
Benzene	5	µg/L	< 50	< 5.0	< 5.0	< 5.0	**6.6**	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	**9.6**	**7.5**	**240**	**220**	**210**	--	**120**	< 5	**29**	**48**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.2 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.29 J**	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**1.0 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.37 J**	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.5 J**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.47 J**	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	< 5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	--	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	--	< 1.0	< 1.0	< 1.0
Acenaphthene	2,000	µg/L	< 5.0	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	**< 0.19**	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.75 J**
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	--	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(e,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.048	< 0.057	< 0.045	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.93 J**
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	--	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	--	< 1.0	< 1.0	< 1.0
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	--	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	20	µg/L	**1.8**	**0.94**	< 0.50	< 0.50	**0.97**	< 0.19	**0.27**	**0.57**	**0.25**	< 0.19	< 0.19	**0.24**	**0.32**	**0.18 J**	**0.42**	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.13	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19	**0.022 J**	< 0.19	< 10	--	--	< 10	< 10	< 10	< 0.2	< 0.2	< 0.0002	< 0.2	< 0.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**2.6**	**0.084 B**	--	0.2 U	**0.082 B**	0.2 U
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	--	< 0.02	< 0.02	< 0.02	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	--	< 0.05	< 0.05	< 0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0063 B**	0.01 U	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.201**	**0.269**	**0.270**	**0.315**	**0.25**	**0.28**	**0.14**	**0.24**	**0.16**	**0.23**	**0.10**	**0.21**	**0.22**	**0.3**	**0.28**	**0.183**	--	--	**0.255**	**0.329**	**0.344**	**0.343**	**0.314**	**0.33**	**0.35**	**0.33**	**0.41**	**0.33**	--	**0.35**	**0.34**	**0.33**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	**0.00028 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	**0.0025 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	--	< 0.005	< 0.005	< 0.005	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0011 B**	**0.00084 B**	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.7**	**18.3**	**21**	**23**	**23**	**22**	**21**	--	**22**	**23**	**21**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0029 J**	**0.0012 J**	< 0.010	< 0.010	< 0.010	**0.016**	**0.0066 J**	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0073 B**	0.01 U	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0077 B**	**0.0045 B**	--	**0.0048 B**	**0.0064 B**	**0.0046 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0037 JB**	< 0.020	< 0.020	< 0.020	< 0.020	**0.0042 J**	< 0.020	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0089 B**	**0.00092 B**	--	**0.0012 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.011**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	--	< 0.010	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	--	< 0.010	< 0.010	< 0.01	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0038 B**	0.005 U	--	0.005 U	0.005 U	0.005 U
Maonesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**16.4**	**12.8**	**15**	**17**	**16**	**16**	**15**	--	**16**	**17**	**15**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	--	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	**0.00024**	0.0002 U	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	**0.0030 J**	< 0.040	< 0.0200	--	--	< 0.02	< 0.02	< 0.02	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0075 B**	**0.0048 B**	--	0.04 U	**0.006 B**	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	**1.2**	**1.2**	**1.1**	**1.4**	**1.4**	--	**1.3**	**1.2**	**1.3**
Selenium	0.05	mo/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	--	< 0.02	< 0.02	< 0.02	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0055 B**	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**26.5**	**23.7**	**26**	**30**	**28**	**28**	**26**	--	**28**	**29**	**26**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	--	< 1.00	< 1	< 0.001	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	--	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	**0.0129**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	**0.0045 J**	< 0.010	< 0.010	< 0.010	< 0.010	0.028	**0.0047 J**	< 0.0100	--	--	**0.0585**	< 0.010	< 0.01	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.012**	0.01 U	--	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.013 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0708**	--	--	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.1**	**0.0073 B**	--	0.02 U	**0.007 B**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-207																													
		Sample Date	1/12/2015	7/17/2014	1/6/2014	7/8/2013	1/7/2013	7/24/2012	1/16/2012	7/5/2011	1/17/2011	7/14/2010	1/6/2010	7/27/2009	1/15/2009	7/15/2008	1/9/2009	7/10/2007	2/15/2007	7/11/2006	1/11/2006	7/21/2005	1/19/2005	7/16/2004	1/23/2004	7/20/2003	1/20/2003	7/9/2002	1/17/2002	7/11/2001	1/18/2001
		Unit	Post-ISCO														Pre-ISCO															
Field Parameters																																
Conductivity	*	mS/cm	0.513	0.492	0.492	0.532	0.524	0.628	0.523	0.616	0.13	0.603	0.586	0.672	1.01	0.635	0.709	0.531	0.709	0.646	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.30	0.86	0.22	0.06	0.14	0.10	4.79	1.43	5.54	0.66	4.48	3.56	5.85	0.39	0.31	0.30	0.78	0.28	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-56.9	75.6	-57.9	-46.0	2.1	-39.4	170.6	-55.4	-14.8	-71.1	-48.9	-36.9	-35.4	-58	-61.8	-41.9	-47.9	-70.7	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.05	6.2	6.12	6.28	6.32	5.47	2.48	5.65	0.5	6.02	5.98	6.18	0.589	6.03	6.03	6.10	6.05	6.04	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.15	22.19	18.88	21.67	18.83	24.67	18.81	23.62	17.85	25.44	15.33	26.85	16.77	22.56	21.04	23.31	17.71	23.39	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.17	0.57	1.59	7.78	0.53	2.13	2.41	9.6	NA	5.73	9.5	30	3.3	4.83	0.99	4.14	4.47	3.21	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	65.3	68.7	71	70	75	80	69	78	75	82	75
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.94	0.981	1.1	1.2	1.3	1.1	1.2	1.3	1.3 N	1.1 N	1.2
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**14 J**	< 100	< 100	< 100	**13.0 J**	< 50	< 50	< 50	< 50	< 10	< 25	< 25	< 25	< 25	**26**	< 25	**120**	< 25	< 25	< 25	< 25
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.23 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.65 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	**0.17 JB**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.10	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.046	< 0.049	< 0.045	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.10	< 0.1	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.058**	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	<0.050	< 0.05	< 0.05	< 0.05	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	**0.12 J**	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.21	< 0.10	< 0.11	< 0.099	< 0.19	< 0.19	< 0.20	< 0.19	< 0.20	< 10	< 10	< 10	< 10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 10	< 10	< 10	< 10	< 10
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	**0.11 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.01	< 0.006	< 0.02	< 0.006	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.013 J**	**0.0095 J**	**0.0046 J**	**0.0082 JB**	< 0.020	< 0.020	**0.0063 J**	**0.0100 J**	<0.0500	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0048 B**	**0.0075 J**	**0.0087 B**	**0.0064 B**	< 0.01
Barium	2	mg/L	**0.271**	**0.262**	**0.353**	**0.290**	**0.35**	**0.34**	**0.34**	**0.31**	**0.33**	**0.25**	**0.29**	**0.3**	**0.35**	**0.34**	**0.366**	**0.335**	**0.323**	**0.347**	**0.335**	**0.379**	**0.38**	**0.41**	**0.41**	**0.37**	**0.4**	**0.4**	**0.4**	**0.39**	**0.41**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00024 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.005	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	**0.00079 B**	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	**0.0062**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0022 B**
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**15.4**	**15.6**	**16**	**18**	**19**	**16**	**17**	**17**	**17**	**16**	**17**	
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0016 J**	**0.0030 J**	**0.0022 J**	**0.0021 J**	< 0.010	< 0.010	**0.0020 J**	**0.0019 J**	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01N
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0182**	**0.0178**	**0.019**	**0.018**	**0.017**	**0.02**	**0.018**	**0.02**	**0.019**	**0.018**	**0.02**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.0< 25	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0011 B**	< 0.02	< 0.02	< 0.02N	**0.0016 B**	
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.012**	**0.0060 J**	**0.017**	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0050 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.015	**0.0051 B**	**0.0058 J**	**0.0059 B**	**0.0076 B**	< 0.01	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0015 B**	< 0.005	
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**18.6**	**17.4**	**18**	**18**	**18**	**16**	**17**	**18**	**18**	**18**	**17**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	**0.00014 B**	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0076 J**	**0.0056 J**	**0.0074 J**	**0.0031 J**	< 0.040	< 0.040	**0.0070 J**	**0.0065 J**	< 0.0200	< 0.02	< 0.02	0.02 U	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	**0.0062 B**	**0.0096 J**	**0.0077 B**	**0.0058 B**	**0.0075 B**	
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**1.26**	**1.6**	**1.8**	**1.8**	**1.8**	**1.6**	**1.7**	**1.8 N**	**1.5**	**1.8**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0061 B**	< 0.01	< 0.01	< 0.01	< 0.01	
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**53**	**51.9**	**49**	**52**	**43**	**50**	**53**	**44**	**40**	**51**	**44**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002WN	< 0.002J	< 0.002	< 0.002	< 0.002	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0051 J**	**0.0083 J**	**0.0048 J**	**0.0063**	< 0.010	< 0.010	**0.0045 J**	**0.0060 J**	< 0.0100	< 0.010	**0.103**	< 0.007	< 0.007	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0036 B**	< 0.004	**0.0044 B**	**0.0042 B**	< 0.01	
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.03**	< 0.02	< 0.02	**0.035**	< 0.02	**0.0069 B**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-211																		
			7/23/2009	1/15/2009	7/17/2008	1/9/2008	7/10/2007	2/13/2007	7/14/2006	1/17/2006	7/20/2005	1/19/2005	7/15/2004	1/24/2004	7/16/2003	1/16/2003	7/12/2002	1/21/2002	7/12/2001	1/16/2001
			Post-ISCO								Pre-ISCO									
Field Parameters																				
Conductivity	*	mS/cm	0.201	0.84	0.3	0.218	0.3	0.622	0.35	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.11	5.92	0.37	0.22	0.27	0.14	0.67	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-83.7	-16.5	-201	-91.0	-92.7	-28.5	-66.7	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.3	0.307	6.13	6.17	6.18	6.13	6.28	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	22.91	20.41	22.88	21.36	22.30	17.34	21.09	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	5.1	4.3	7.29	9.37	2.80	0.84	4.82	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																				
Carbon Dioxide	*	µg/L	880	710	990	< 1000	< 1000	--	720	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	14.4	15.9	2.31	0.05 U	0.05 U	3.6	0.04 U	0.050 U	0.028 B	0.05 U	0.13	0.031 B
Iron, as Ferrous (Fe+2)	*	mg/L	1.6 HF	1.2 HF	4.1	7.10	13.4	12.2	12.9	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	2.98	2.72	0.399	0.82	0.49	2.1	0.77	0.91	0.55	0.92	1.2	0.72
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	2.23	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	670	260	150	100	3,000	140	220	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 1.1	0.26	0.66	0.32	< 0.25	0.64	1.1	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	0.89	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	0.98	1.2	1.1	3.3	1.7	1.1	1.2	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	5.6	20	16	17	18	23	37	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.79 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	**0.58 J**	1.0 U	
Ethylbenzene	700	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**
Methylene Chloride	5	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.32 J**	5.0 U	5.0 U	
Toluene	1,000	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethylene	5	µg/L	**5.7**	**1.4 J**	**2.5 J**	< 5.0	**5.8**	< 5	**8.2**	**3.3**	1.0 U	**3.2**	**2.2**	**2.4**	**5**	**4.4**	**4.7**	**5.4**	**7.3**	**0.74**
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	ua/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	ua/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.19	**0.027 JB**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.25**	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	**0.364**	**3.02**	0.2 U	0.2 U	**6.4**	0.2 U	**0.068 B**	**0.028 B**	**0.03 B**	**0.13 B**	0.2 U
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	**0.0076 B**
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	**0.0126**	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.069**	**0.099**	**0.075**	**0.0714**	**0.0763**	**0.0763**	**0.0577**	0.2 U	**0.0623**	**0.066**	**0.065**	**0.094**	**0.05**	**0.052**	**0.059**	**0.064**	**0.06**	**0.047**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	**0.0022 B**
Cadmium	0.005	mg/L	**0.01**	**0.01**	**0.009**	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**--**	**--**	**--**	--	--	--	--	**27.8**	**24.1**	**17**	**21**	**20**	**22**	**22**	**22**	**23**	**22**	**20**
Chromium	0.1	mg/L	< 0.010	**0.0015 J**	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	**--**	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.020	**0.0064 J**	**0.0055 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	**0.0009 B**	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	**0.0070 J**	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0042**	**0.0158**	0.005 U	0.005 U	**0.0054**	0.005 UJ	0.0050 U	0.005 U	0.005 U	0.005 U	**0.0034 B**
Magnesium	*	mg/L	**--**	--	--	--	--	--	--	**6**	**4.2**	**9.2**	**12**	**9.9**	**9.9**	**11**	**12**	**12**	**12**	**11**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00016 B**	**0.00014 B**	**0.00016 B**	**0.00021**	**0.00025**
Nickel	0.1	mg/L	< 0.040	< 0.040	**0.0044 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**--**	--	--	--	--	--	--	**27.9**	**103**	**5.4**	**5.8**	**6**	**4.7**	**5.7**	**5.5**	**5.4**	**5.0**	**5.5**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**--**	--	--	--	--	--	--	**41.6**	**5.68**	**59**	**74**	**64**	**55**	**46**	**47**	**43**	**37**	**45**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.010	**0.0026 J**	**0.0040 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	**0.0453**	0.01 U	0.01 U	**0.013**	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.042**	**0.034**	**0.023**	**0.0320**	< 0.02	**0.0703**	0.02 U	**0.0392**	**0.291**	**0.061**	0.02 U	**0.025**	**0.04**	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
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M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
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UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-214																														
			1/13/2015	7/15/2014	1/9/2014	7/8/2013	1/8/2013	7/24/2012	1/16/2012	7/5/2011	1/17/2011	7/15/2010	1/5/2010	7/22/2009	1/14/2009	7/18/2008	1/8/2008	7/11/2007	2/15/2007	7/11/2006	1/15/2006	7/19/2005	7/13/2004	1/21/2004	7/15/2003	1/20/2003	7/11/2002	1/21/2002	7/13/2001	07/01 DUP	1/17/2001
			Post-ISCO																			Pre-ISCO											
Field Parameters																																	
Conductivity	*	mS/cm	0.226	0.203	0.171	0.206	0.308	0.305	0.327	0.206	2.24	0.243	0.214	0.249	0.65	0.252	0.230	0.229	0.237	0.214	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.45	0.89	0.37	0.44	0.53	0.14	0.74	0.73	6.88	0.41	3.38	2.59	6.75	0.49	0.62	0.28	0.46	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-73.5	-49.8	-74.0	-144.8	-61.5	-106.2	-144.2	-48.9	-62	-78	-44.6	-253.5	-76.8	-118	-90.9	-69.2	-85.3	-71	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.51	6.34	6.76	6.79	6.65	6.45	6.81	6.36	0.254	6.68	6.9	12.81	0.24	6.66	6.71	6.80	6.8	6.85	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.6	21.45	20.82	22.67	17.32	25.62	17.77	24.38	16.97	23.8	16.51	26.37	19.15	24.23	20.72	24.61	18.94	22.99	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.19	2.51	3.21	1.37	3.60	7.22	6.42	9.3	2.18	1.25	7.63	3.2	5.3	1.23	0.09	0.69	2.55	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																	
Carbon Dioxide	*	µg/L	108	101	125	107	28	40	380 B	300 B	220 *	310 JB	260	270 *	250	270	< 1000	< 1000	--	240	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.09	2.04	1.55	1.4	2.6	4.5	0.46	0.99	2	1.8	1.8	1.7
Iron, as Ferrous (Fe+2)	*	mg/L	2.56	< 0.100	0.149 H	0.518 H	0.43 HF	2.0 HF	1.3 HF	0.41 HF	0.59 HF	1.1 HF	1.0 HF	1.0 HF	0.12 HF	1.4	2.48	2.41	2.17	1.87 H	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.722	0.644	0.655	0.73	0.74	0.95	0.49	0.6	0.7	0.68	0.69	0.72
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.604	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	410	< 4	650	680	2,400	3,600	1,600	24	37	46	230	190	100	32	140	160	140	100	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	ma/L	< 0.25	0.42	<0.25	<0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	<1.1	< 1.1	< 1.1	< 0.050	<0.50	< 0.25	< 0.25	< 0.25	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.17 H	7.95 H	5.55 H	6.75 H	5.0	3.7	1.2	1.7	2.2	1.5	1.4	1.4	1.3	1.3	2.0	1.8	1.8	2.8	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	< 1.0	26	<1.0	<1.0	< 5.0	< 5.0	< 2.6	< 2.6	< 2.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	1.1	1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																	
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 UJ
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	**0.49 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	**0.2 J**	**0.21 J**	**0.29 J**	
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	0.123	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	1.0 U	1.0 U	1.0 U	0.12 U	
Methylene Chloride	5	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.61 J**	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.32 J**	2.0 U	2.0 U	2.0 U	2.0 U	
Semivolatile Organic Compounds																																	
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(a)pyrene	0.2	ua/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(b)fluoranthene	0.2	ua/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.043	< 0.049	< 0.046	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Dibenzofuran	1	µg/L	--	--	--	--	< 0.23	< 0.19	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Fluorene	1,000	ua/L	< 0.10	< 0.10	< 0.10	< 0.10	--	--	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Indeno/1.2.3-cd)pyrene	0.4	ua/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Naphthalene	20	ua/L	< 500	< 0.50	< 0.50	< 0.50	< 0.23	< 0.19	**1.0**	< 0.11	**1.1**	< 0.19	< 0.19	< 0.19	**0.037 J**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Phenanthrene	10	µg/L	<0.50	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.23	< 0.19	< 0.095	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U		
Inorganic Compounds																																	
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.234**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.032 B**	**0.047 B**	**0.046 B**	**0.043 B**	0.2 U		
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0071 J**		
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0053 B**	0.01 U		
Barium	2	mg/L	**0.338**	**0.0362**	**0.324**	**0.241**	**0.28**	**0.15**	**0.22**	**0.34**	**0.12**	**0.82**	**0.33**	**0.35**	**0.33**	**0.33**	**0.350**	**0.315**	**0.284**	**0.306**	**0.264**	**0.251**	**0.25**	**0.29**	**0.17**	**0.27**	**0.3**	**0.33**	**0.3**	**0.31**	**0.31**		
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00020 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00098 U	
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	**0.0213**	< 0.0050	**0.025**	**0.016**	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	**0.008**	**0.00077 B**	**0.00084 B**	0.005 U	0.005 U	0.005 U	**0.0012 J**		
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**18.8**	**20.8**	**22**	**19**	**22**	**18**	**18**	**18**	**17**	**18**	**17**		
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0012 J**	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0032 B**	0.01 U	0.01 U	0.01 U		
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0019 B**	**0.0028 B**	**0.003 B**	**0.0035 B**	**0.0027 B**	**0.0032 J**		
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	**0.0025 J**	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0022 B**	**0.0015 B**	**0.0016 B**	0.02 U	0.02 U	0.02 U		
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.015**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0030 J**	**0.0031 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0026 U		
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.31**	**9.3**	**8.6**	**9.2**	**5.2**	**8.9**	**9**	**9.7**	**9.1**	**9.2**	**8.9**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000084	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00011 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U		
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0036 J**	**0.0028 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0025 J**	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.99**	**3.3**	**4.2**	**33**	**5**	**3.6**	**2.6**	**2.6**	**2.6**	**2.9**			
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**12.8**	**14.4**	**13**	**13**	**5.5**	**13**	**13**	**14**	**13**	**13**	**13**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	**0.00037 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U	0.002 U		
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0061 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.110**	< 0.0200	<0.020	**0.064**	**0.018 J**	**0.022**	< 0.0087	<0.020	<0.020	**0.032**	**0.013 J**	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	**0.066**	**1.2**	**0.032**	**0.025**	0.02 U	0.02 U	**0.015 B**	**0.052**		

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-303																													
		Sample Date	1/13/2015	7/15/2014	1/8/2014	7/9/2013	1/7/2013	7/23/2012	1/17/2012	7/5/2011	1/17/2011	7/15/2010	1/5/2010	7/22/2009	1/14/2009	7/17/2008	1/9/2008	7/11/2007	2/15/2007	7/12/2006	2/8/2006	1/11/2006	7/22/2005	1/20/2005	7/14/2004	1/20/2004	7/17/2003	1/15/2003	7/10/2002	1/22/2002	7/10/2001	1/18/2001
		Unit	Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.545	0.553	0.563	0.671	0.680	0.767	0.649	0.687	2.16	0.668	0.632	0.713	0.76	0.842	0.799	0.805	0.874	0.846	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.57	0.24	0.20	0.14	0.58	0.57	3.50	1.16	5.96	0.43	0.36	0.19	5.45	0.39	7.99	0.42	0.26	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-4.2	-26.9	-12.3	43.5	13.6	46.6	138.0	36.7	-13.1	-132.5	21	68.6	84.8	66.7	103.7	118.9	86.3	124.6	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.69	6.04	5.97	5.96	5.99	5.11	5.80	5.03	6.66	5.88	6.23	5.53	0.84	5.45	5.81	5.57	5.73	5.93	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.5	23.36	21.66	24.28	22.32	26.96	23.35	24.18	19.83	25.41	17.36	25.16	21.65	26.29	22.84	23.60	21.37	24.43	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.24	6.03	2.35	1.72	1.78	9.05	6.8	5.42	0.79	8.6	2.81	2.1	1.2	6.26	0.08	0.00	0.82	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	168	207	388	314	240	240	3,400 B	3,400 B	2,700 *	3,500 JB	3,000	3,600 *	3,900	3,800	< 1000	< 1000	--	1,700	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	--	0.463	0.397	0.67	0.69	0.98	1	1.9	2.5	1.8	1.5	1.1
Iron, as Ferrous (Fe+2)	*	mg/L	6.83	10	9.78	8.34	8.6 HF	10 HF	2.5 HF	12 HF	13 HF	10 HF	9.6 HF	7.1 HF	9.6 HF	6.6	2.41	0.87	0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.417	--	0.845	0.792	0.83	0.69	0.59	0.54	0.59	0.69	0.54	0.54	0.43
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.368	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	150	170	100	100	21	38	23	53	52	54	25	13	6.7	0.49	10	18	9	0.94	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.075	0.19 J	< 0.075	< 0.36	<1.1	< 1.1	< 1.1	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25	0.49	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen. ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.89 H	7.08 H	8.16 H	6.96 H	5.2	5.6	1.1	1.2	1.3	1.2	1.2	0.84	0.86	0.89	1.8	1.9	1.5	1.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	< 1.0	77	76	120	140	140	120	150	120	110	150	160	170	210	210	200	210	150	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	**67**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	**9.0**	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.13 J**	**3.5**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.4 J B ***	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	**0.34 J**	5.0 U	5.0 U	5.0 U
Toluene	1,000	ua/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.41 J**	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.26 J**	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.49 J**	**0.93 J**	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	ua/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.11	< 0.095	< 0.12	**0.64**	**1.3**	< 0.94	**0.61**	**0.23**	**0.024 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.33 J**	**30**	10 U	10 U
Acenaphthylene	10	ua/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.11	< 0.095	**0.21 J**	**0.31**	**0.56**	< 0.94	**0.36**	**0.22**	**0.076 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	**0.087**	**0.18**	**0.14**	**0.13**	< 0.20	< 0.11	**0.12 J**	**0.25**	**0.23**	**0.26**	< 0.94	< 0.19	**0.14 J**	**0.095 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.048	< 0.043	< 0.056	< 0.047	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**0.8 J**	10 U	10 U
Fluoranthene	1,000	µg/L	**0.11**	**0.14**	**0.10**	< 0.10	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.11	< 0.095	**0.15 J**	**0.36**	**0.44**	< 0.94	< 0.19	**0.11 J**	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	< 0.50	< 0.20	< 0.11	**0.80**	< 0.12	**0.25**	**2**	**46 B**	**1.2**	**0.63**	**0.049 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	1	< 0.19	**0.088 J**	**0.043 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**1.2 J**	10 U	10 U
Pyrene	1,000	µg/L	**0.11**	**0.11**	**0.072**	< 0.050	< 0.20	< 0.11	< 0.095	< 0.12	< 0.10	< 0.19	< 0.94	< 0.19	**0.076 J**	**0.061 J**	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.209**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	**0.04 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0888**	**0.0945**	**0.0943**	**0.113**	**0.14**	**0.14**	**0.14**	**0.14**	**0.14**	**0.12**	**0.12**	**0.14**	**0.16**	**0.24**	**0.230**	**0.193**	**0.226**	**0.22**	--	0.2 U	**0.178**	**0.25**	**0.24**	**0.22**	**0.22**	**0.25**	**0.24**	**0.23**	**0.24**	**0.23**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	**0.00041 J**	**0.00025 J**	**0.00056 J**	**0.00053 J**	**0.00044 J**	< 0.0040	< 0.0040	**0.00069 J**	**0.00085 J**	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	**0.0051**	< 0.0020	**0.0029 J**	< 0.0050	< 0.0050	< 0.0050	**0.00064 J**	**0.00096 J**	< 0.0050	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**43.8**	**43.2**	**48**	**46**	**41**	**37**	**40**	**39**	**41**	**41**	**37**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0013 J**	< 0.010	< 0.010	< 0.010	**0.0015 J**	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0022 B**	0.01 U	**0.0023 B**	**0.002 B**	**0.0017 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	**0.0025 J**	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	**0.00091 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.017**	< 0.0050	< 0.010	**0.013**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40.7**	**39.6**	**45**	**43**	**39**	**37**	**37**	**34**	**38**	**39**	**35**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0073 J**	**0.0065 J**	**0.0064 J**	**0.0060 J**	**0.0046 J**	< 0.040	< 0.040	**0.0070 J**	**0.0079 J**	< 0.0200	**0.0291**	< 0.02	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	< 0.0100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	1 U	**1.4**	**1.3**	**1.3**	**1.4**	**1.4**	**1.5**	**1.9**	**1.3**	**4.2**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**56.1**	**66.6**	**75**	**61**	**49**	**51**	**51**	**42**	**42**	**50**	**49**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	**0.00029 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.0010 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0021 J**	**0.0032 J**	< 0.0100	< 0.010	**0.0779**	**0.109**	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	<0.020	**0.0088 J**	**0.061**	< 0.0087	**0.022**	<0.020	<0.020	**0.026**	**0.032**	**0.038**	**0.0238**	< 0.02	< 0.02	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.0071 B**	**0.0066 B**	**0.012 B**	0.02 U	**0.032**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-304																																	
			1/15/2015	7/15/2014	1/8/2014	7/11/2013	1/8/2013	7/25/2012	1/18/2012	7/5/2011	1/18/2011	7/14/2010	1/6/2010	7/23/2009	1/20/2009	7/15/2008	1/9/2008	7/12/2007	2/15/2007	02/07 DUP	7/12/2006	07/06 DUP	1/16/2006	7/22/2005	1/21/2005	7/14/2004	7/14/2004	1/24/2004	1/24/2004	7/20/2003	1/20/2003	7/17/2002	4/4/2002	1/22/2002	7/16/2001	1/17/2001
			Post-ISCO																					Pre-ISCO												
Field Parameters																																				
Conductivity	*	mS/cm	0.448	0.576	0.461	0.561	0.417	0.470	0.470	0.530	0.466	0.533	0.451	0.581	0.366	0.494	0.619	0.547	0.622	0.622	0.474	0.474	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.32	0.18	1.08	0.32	0.66	0.45	0.45	0.16	1.22	0.62	10.14	0.27	0.56	0.6	0.29	0.31	0.14	0.14	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-47.1	-54.7	-44.1	-31.4	6.9	-56.1	-56.1	-32.3	-42.6	-106.7	-36.4	-1.2	-8	-89.7	-46.9	-35.8	-28.5	-28.5	-34.3	-34.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.04	6.1	6.30	6.02	6.35	6.11	6.11	6.11	6.36	6.15	7.06	6.04	5.96	5.86	5.96	6.05	6.13	6.13	6.02	6.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	14.6	24.25	16.89	20.51	16.64	16.26	16.26	25.14	16.43	21.47	12.77	20.34	15.39	14.44	18.28	20.01	17.34	17.34	20.11	20.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.94	0.69	8.31	0.95	2.09	9.93	9.93	1.74	9.19	9.1	8.09	4.8	3	1.42	0.00	4.5	0.84	0.84	3.39	3.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																				
Carbon Dioxide	*	µg/L	305	202	560	352	120	240	3,100 B	2,800 B	2,800	2,500 JB	1,500	2,600	1,400	2,700	< 1000	< 1000	--	--	2,700	2,600	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40.1	41.1	42.2	41.1	43	42	43	39	42	40	40	43	--	40	40	41
Iron, as Ferrous (Fe+2)	*	mg/L	32.7	32.7	41.9	42.8 H	40 HF	37 HF	16 HF	25 HF	38 HF	--	32 HF	32 HF	2.2 HF	36	43.5	39.1	43.8	43.5	42.2	42.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7,000	1.67	1.64	1.6	1.4	1.6	1.6	1.6	1.4	1.5	1.4	1.4	1.5	--	1.4	1.4	1.4
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25	1.41	1.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	6,700	3700	7,400	6,400	1,900	6,000	5,800	3,100	--	5,000	1,100	6,200	1,800	3,300	6,800	7,600	7,200	7,000	5,700	6,900	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L		< 0.25	<0.25	<0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	< 1.1	< 1.1	< 1.1	0.048 J	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	3.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.48 H	5.52 H	6.33 H	5.28 H	5.2	3.5	1.1	1.4	1.2	1.3	1.4	0.87	1.2	0.89	1.7	0.81	1.7	3.4	1	0.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L		< 1.0	<1.0	<1.0	< 5.0	< 5.0	< 2.6	< 2.6	< 2.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1	< 1	< 1	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2	< 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																				
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 25	< 25	**45 J**	< 500	< 100	< 100	< 100	< 50	< 50	< 50 R	< 50	50 R	50 R	80 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	--	25 U	25 U	25 U
Benzene	5	µg/L	**27**	**91**	**27**	**76**	**10**	**43**	**140**	**620**	**410**	**480**	**800**	**340**	**31**	**160**	**130**	**580**	**470**	**460**	**430**	**440**	**0.2**	**4.6**	**24**	**22**	**26**	**18**	**2**	**1.6**	**25**	1.0 U	**32**	**46**	**34**	**34**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 3.0	< 3.0	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 250	< 5.0	**13**	**28**	<5.0	**36**	**0.97 J**	**2.5 J**	< 0.55	**1.3 J**	< 25	< 5.0	**1.7 J**	**1.8 J**	< 5.0	< 5	**8.8**	**7.7**	**5.4**	**10**	**8.0**	**36**	**67**	**76**	**94**	**75**	**79**	**59**	**110**	1.0 U	**120**	**250 D**	**150**	**140**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 5.0	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.36 J**	5.0 U	5.0 U	5.0 U	5.0 U	**0.67 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 1.7	< 1.6	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	1.0 U	**12**	1.0 U	**13**	1.0 U	1.0 U	1.0 U	**11**	1.0 U	**26**	**62**	**33**	**36**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.65	< 0.65	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	< 5	< 5	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.23 J**	**0.41 J**	
Xylenes, total	2,000	µg/L	**9.6**	< 5.0	**26**	**29**	<5.0	**43**	**14**	**10 J**	**9.5 J**	**15 J**	**34**	**8.8**	**5.8**	**17**	**19**	**8.4**	**38**	**37**	**12 J**	**21 J**	16 U	**43**	**66**	**50**	**56**	**43**	**43**	**36**	**50 B**	2.0 U	--	**110**	**94**	**83**
Semivolatile Organic Compounds																																				
2-Methylnaphthalene		µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**19**	**2.1**	**87**	**73**	**76**	**59**	**65**	**56**	**82**	**74**			**100**	**96**	**150**
Acenaphthene	2,000	µg/L	**31**	**34**	**32**	**53**	**31**	**58**	**71**	**4.2**	**28**	**25**	**48**	**29**	**23**	**18**	**44**	< 10	**47**	**47**	**37**	**44**	**38**	**3.6**	**80**	**75**	**78**	**47**	**50**	**68**	**58**	**52**	**98**	**59**	**70**	**120**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<20	< 4.3	< 0.11	< 0.10	**0.21**	**0.16 J**	< 4.0	< 0.39	**0.27**	**0.28**	< 10	< 10	< 10	< 10	< 10	< 10	0.2 U	0.2 U	10 U	10 U	10 U	**0.29**	0.2 U	10 U	**0.57 J**	10 U	40 U	50 U	**1.0 J**	**1.8 J**
Anthracene	10	µg/L	**0.54**	**0.46**	**0.93**	**1.1**	<20	< 4.3	**0.50**	< 0.10	**0.27**	**0.24**	< 4.0	**0.47**	**0.33**	**0.51**	< 10	< 10	< 10	< 10	< 10	< 10	**0.59**	0.2 U	10 U	10 U	10 U	**1.6**	**16**	10 U	**0.18 J**	**2**	**2.7 J**	50 U	**2.2 J**	**3 J**
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 10	< 10	< 10	< 10	< 10	< 10	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	**0.95 JB**	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 10	< 10	< 10	< 10	< 10	< 10	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.048	< 0.046	< 0.045	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	**0.86 JB**	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	10 U	10 U	10 U	**1.7**	**2.0**	10 U	**2.1 J**	**21 J**	--	**2.3 J**	**2.6 J**	**4.3 J**
Fluoranthene	1,000	µg/L	**0.40**	**0.43**	**0.54**	**0.62**	<20	< 4.3	**0.39**	< 0.10	**0.20**	**0.21**	< 4.0	< 0.39	**0.24**	**0.29**	< 10	< 10	< 10	< 10	< 10	< 10	**0.45**	0.2 U	10 U	10 U	10 U	**0.76**	**0.76**	10 U	**0.84 J**	**0.95 J**	40 U	50 U	**0.78 J**	10 U
Fluorene	1,000	µg/L	**4.4**	**3.5**	**5.8**	**6.6**	<20	**8.4**	**5.0**	**0.50**	**3.0**	**2.3**	**6.4**	**2.6**	**2.7**	**3.9**	< 10	< 10	< 10	< 10	< 10	< 10	**4.3**	**0.42**	**13**	**11**	**12**	**11**	**12**	**13**	**11**	**11**	**18 J**	**9.3 J**	**13**	**21**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.064**	< 0.050	< 0.050	< 0.050	<20	< 4.3	< 0.11	< 0.10	< 0.10	< 0.19	< 4.0	< 0.39	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	10 U	10 U	10 U	0.2 U	0.2 U	10 U	10 U	10 U	40 U	50 U	**0.77 JB**	10 U
Naphthalene	20	µg/L	**27**	**12**	**65**	**280**	**300**	**430**	**98**	**20**	**50**	**110**	**190**	**21**	**17**	**76**	**110**	< 10	**190**	**180**	**160**	**210**	**87**	**35**	**700**	**560**	**580**	**450**	**500**	**400**	**620**	**570 D**	**1,300 D**	**980**	**880 D**	**1,200 D**
Phenanthrene	10	µg/L	**3.2**	**2.1**	**5**	**5.7**	<20	**7.2**	**3.0**	**0.18 J**	**1.5**	**1.2**	**5.5**	**1.6**	**1.7**	**2.4**	< 10	< 10	< 10	< 10	< 10	< 10	**3.0**	**0.24**	**10**	**10**	**11**	**9.4**	**9.3**	**11**	**11**	**11**	**16 J**	**11 J**	**12**	**19**
Pyrene	1,000	µg/L	**0.42**	0.45	**0.52**	**0.54**	<20	< 4.3	**0.40**	< 0.10	**0.28**	**0.25**	< 4.0	< 0.39	**0.24**	**0.37**	< 10	< 10	< 10	< 10	< 10	< 10	**0.51**	0.2 U	10 U	10 U	10 U	**0.76**	**0.83**	10 U	**0.95 J**	**0.81 J**	40 U	50 U	**0.92 J**	**1.2 J**
Inorganic Compounds																																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.084 B**	--	0.2 U	**0.1 B**	**0.2 B**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.01 U	0.006 U	0.02 U	0.006 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.050	< 0.050	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	<0.0500	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.324**	**0.367**	**0.395**	**0.407**	**0.37**	**0.38**	**0.38**	**0.35**	**0.34**	**0.38**	**0.34**	**0.36**	**0.32**	**0.35**	**0.346**	**0.348**	**0.372**	**0.363**	**0.382**	**0.39**	**0.382**	**0.354**	**0.38**	**0.4**	**0.4**	**0.36**	**0.38**	**0.33**	**0.39**	**0.4**	--	**0.38**	**0.37**	**0.39**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	**0.0017 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**25.4**	**24.1**	**25**	**24**	**25**	**25**	**26**	**24**	**25**	**26**	--	**24**	**24**	**22**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0026 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0074 B**	**0.0085 B**	--	**0.0085 B**	**0.0077 B**	**0.0087 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0057 J**	**0.0035 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0016 B**	--	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	**0.009 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.013**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**17.1**	**14.5**	**16**	**15**	**16**	**15**	**16**	**15**	**16**	**16**	--	**16**	**16**	**15**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00012 B**	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.36**	**3.7**	**3.8**	**3.9**	**3.4**	**3.6**	**4**	**3.7**	**4**	--	**3.8**	**3.6**	**3.9**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**37.3**	**36.9**	**34**	**36**	**37**	**36**	**37**	**39**	**40**	--	--	**37**	**39**	**41**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	< 1	< 1	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 UWN	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	**0.0041 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0033 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	**0.010 J**	< 0.020	< 0.020	**0.016 J**	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.02 U	0.02 U	--	0.02 U	0.02 U	**0.0059 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306S																		
		Sample Date	2/14/2007	2/8/2006	1/12/2006	7/22/2005	07/05 DUP	1/20/2005	01/05 DUP	7/15/2004	07/04 DUP	1/22/2004	1/04 DUP	7/18/2003	7/03 DUP	1/15/2003	1/03 DUP	7/10/2002	1/15/2002	7/11/2001	1/22/2001
		Unit	Post-ISCO			Pre-ISCO															
Field Parameters																					
Conductivity	*	mS/cm	1.065	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	mV	6.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	SU	96.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	18.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																					
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	0.143	0.1 U	0.1 U	0.13	0.13	0.063	0.081	0.086	0.054	0.04 U	0.05	0.051	0.062	--	0.54 N	1.9	2.5 N
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	1.71	1.47	1.44	2	2.1	2.1	2.1	2.2	2.2	1.5	1.6	1.4	1.4	--	2.6	6.2 N	7.8
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																					
Acetone	4,000	µg/L	< 50	--	140 U	50 U	50 U	120 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.11 J**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5	9.1 U	25 U	10 U	10 U	25 U	5.0 U	5.0 U	5.0 U	50 U	50 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5	--	14 U	2.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.82 J**	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5	--	29 U	4.0 U	4.0 U	10 U	2.0 U	2.0 U	2.0 U	20 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																					
2-Methylnaphthalene	*	µg/L	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.36 J**	**0.53 J**
Benz(a)anthracene	0.1	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.61 J**	**0.84 J**
Fluorene	1,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**1.4 J**	**2.5 J**
Pyrene	1,000	µg/L	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																					
Aluminum (fume or dust)	*	mg/L	--	--	**1.99**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	--	**0.061 BN**	0.2 U	**0.033 B**
Antimony	0.01	mg/L	< 0.02	--	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	--	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.05	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	--	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.119**	--	0.2 U	**0.129**	**0.133**	**0.13**	**0.13**	**0.17**	**0.16**	**0.17**	**0.17**	**0.17**	**0.17**	**0.23**	**0.23**	--	**0.20**	**0.22**	**0.23**
Beryllium	0.004	mg/L	< 0.010	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.0040 U	--	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.005	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	--	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**124**	**136**	**141**	**130**	**130**	**160**	**150**	**170**	**170**	**190**	**160**	**160**	**160**	--	**140**	**150**	**160**
Chromium	0.1	mg/L	< 0.010	--	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.010 U	0.010 U	--	0.010 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0023 B**	**0.0025 B**	--	**0.0036 B**	**0.0063 B**	**0.0067 B**
Copper	1.3	mg/L	< 0.010	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0018 U	**0.0026 B**	--	**0.0013 B**	0.02 UN	**0.0014 B**
Cyanide	0.2	mg/L	< 0.010	--	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.010 U	0.010 U	--	0.010 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	--	0.0050 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	**38.4**	**39.8**	**41.3**	**39**	**39**	**48**	**47**	**52**	**51**	**52**	**52**	**48**	**48**	--	**44**	**47**	**47**
Mercury	0.002	mg/L	< 0.0002	--	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 UJ	**0.00011 B**	**0.000096 B**	--	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.02	--	0.04 U	**0.0442**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.044**	**0.043**	--	**0.022 B**	0.04 U	**0.0061 B**
Potassium	*	mg/L	--	--	**20.9**	**21.8**	**22.9**	**20**	**20**	**25**	**24**	**25**	**25**	**34**	**34**	**22**	**22**	--	**20**	**23**	**21**
Selenium	0.05	mg/L	< 0.02	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	--	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**64.3**	**74.3**	**76.7**	**75**	**77**	**90**	**89**	**83**	**80**	**90**	**88**	**48**	**48**	--	**63**	**52**	**54**
Thallium	0.002	mg/L	< 1	--	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.0020 UJ	0.0020 UWN	--	0.0020 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.010	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0031 B**	**0.0030 B**	--	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.02	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.03**	**0.0092 B**	**0.0088 B**	--	**0.0085 B**	**0.0097 B**	**0.013 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-306D																																
			1/13/2015	7/14/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/17/2012	7/5/2011	1/18/2011	7/20/2010	1/6/2010	7/21/2009	01/19/2009	07/22/2008	1/8/2008	7/10/2007	2/15/2007	02/07 DUP	7/11/2006	2/8/2006	1/12/2006	7/22/2005	1/20/2005	7/15/2004	1/22/2004	7/19/2003	1/15/2003	7/9/2002	1/15/2002	7/11/2001	1/22/2001
			Post-ISCO																				Pre-ISCO												
Field Parameters																																			
Conductivity	*	mS/cm	0.635	0.653	0.804	1.480	1.429	1.521	1.215	1.107	0.656	0.678	1.572	1.395	1.430	0.925	0.798	0.620	0.685	0.685	0.543	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.21	1.82	0.22	0.17	3.71	1.70	0.32	0.28	0.45	6.8	0.32	6.18	0.27	0.73	0.28	0.24	0.28	0.28	2.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	10.7	28	-7.7	-14.3	-51.0	-5.9	97.0	-11.5	226	-6.7	-29.2	-53.4	-43.6	-14.8	10.6	36.2	-8.9	-8.9	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.94	6.06	6.24	6.07	6.41	5.76	4.07	6.15	5.71	6.89	6.15	8.12	6.11	6.19	6.00	6.13	6.15	6.15	5.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	19.1	21.37	20.04	22.36	20.71	21.64	20.15	25.84	19.24	25.41	18.62	21.99	19.78	22.07	21.81	22.03	19.62	19.62	21.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	3.61	2.85	1.24	3.15	1.90	1.66	0.92	0.62	8	4.17	0.88	0.62	0	1.2	2.10	0.00	0.21	0.21	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																			
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.59	8.94	7.3	4.3	7.2	6.7	28	28	24 N	25	23 N	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002 U	--	1.56	1.52	1.6	1.5	1.6	1.2	2.5	2.5	2.3	2.5 N	2.5	--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50 R	< 50	50 U	--	20 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.95	< 0.95	**0.56 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5 U	< 5	5 U	1.0 U	5.4 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	--	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	--	--
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	**0.36 J**	**0.43 J**	**0.36 J**	**0.55 J**	**0.91 J**	--	--
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	--	--
Anthracene	10	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	**0.032 J**	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.38 J**	--
Benz(a)anthracene	0.1	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(a)pyrene	0.2	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(b)fluoranthene	0.2	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(e,a,h,i)perylene	10	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Benzo(k)fluoranthene	10	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Chrysene	0.2	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.047	< 0.062	< 0.043	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Dibenzo(a,h)anthracene	0.3	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Dibenzofuran	1	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**0.3 J**	10 U	10 U	--	--
Fluoranthene	1,000	ug/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	**0.044 J***	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.81 J**	--
Indeno(1,2,3-cd)pyrene	0.4	ug/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Naphthalene	20	ug/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	**4.1**	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	**0.034 J**	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	< 0.21 *	< 0.19	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**1.2 J**	--
Pyrene	1,000	ug/L	< 0.050	< 0.050	**0.075**	**0.060**	< 0.19	< 0.23	< 0.10	< 0.14	< 0.096	< 0.19	< 0.19	< 0.19	**0.043 J**	**0.035 J**	< 10	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	--	--
Inorganic Compounds																																			
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	**0.043 BN**	0.2 U	0.2 U	--	--
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U	--	--
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0034 B**	0.01 U	0.010 U	**0.0036 B**	0.01 U	--	--
Barium	2	mg/L	**0.377**	**0.435**	**0.424**	**0.785**	**0.69**	**0.71**	**0.61**	**0.53**	**0.37**	**0.39**	**0.73**	**0.63**	**0.74**	**0.46**	**0.464**	**0.370**	**0.363**	**0.363**	**0.373**	--	**0.372**	**0.363**	**0.41**	**0.39**	**0.36**	**0.25**	**0.42**	**0.37**	**0.36**	**0.36**	**0.35**	--	--
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U	--	--
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U	--	--
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**37.4**	**41.6**	**39**	**37**	**39**	**30**	**51**	**50**	**46**	**50**	**48**	--	--
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0016 J**	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 UN	0.01 U	--	--
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0018 B**	0.01 U	0.010 U	0.01 U	0.01 U	--	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0023 J**	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 UN	**0.0017 B**	--	--
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0083 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	--	--
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	**0.0018 B**	0.005 U	--	--
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**37.8**	**37.3**	**36**	**34**	**35**	**27**	**38**	**37**	**34**	**37**	**35**	--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	--	--	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	--	--
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0029 J**	**0.0029 J**	**0.0029 J**	< 0.040	< 0.040	< 0.040	< 0.040	**0.0026 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	**0.0065 B**	0.040 U	0.04 U	--	--
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.27**	**3.8**	**2.8**	**3.4**	**3**	**3.8**	**4**	**4.0**	**4.4**	**4.3**	--	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.010 U	0.01 U	0.010 U	0.01 U	--	--
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**45.5**	**47.1**	**42**	**34**	**34**	**30**	**77**	**72**	**79**	**85**	**82**	--	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.0020 U	0.002 UW	0.002 UW	--	--
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	--	--
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.011 J**	< 0.0087	< 0.0087	**0.0096 J**	< 0.020	< 0.020	**0.012 J**	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.0076 B**	0.020 U	0.02 U	--	--

Notes:
-- - *Not analyzed*
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306SAP																		
		Sample Date	1/14/2015	7/15/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/17/2012	7/6/2011	1/18-19/2011	1/6/2010	7/21/2009	1/19/2009	7/22/2008	1/22/2004	1/16/2003	7/10/2002	1/16/2002	7/11/2001	1/24/2001
		Unit	Post-ISCO													Pre-ISCO					
Field Parameters																					
Conductivity	*	mS/cm	1.390	1.375	1.493	1.431	1.330	1.268	1.268	1.497	1.172	0.899	1.617	1.319	1.62	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.21	4.87	5.23	5.53	--	4.75	4.75	4.20	5.69	9.89	6.26	2.5	0.78	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-23.2	-3.6	-38.8	25.3	-34.0	128.7	128.7	2.0	5.31	-12.1	-71.9	6.03	1.5	--	--	--	--	--	--
pH	*	SU	6.06	6.43	6.47	6.10	6.44	3.84	3.84	6.34	220.0	6.29	6.6	11.7	6.15	--	--	--	--	--	--
Temperature	*	Celsius	15.40	25.72	16.77	21.87	19.92	15.83	15.83	24.26	15.19	13.66	30.52	16.04	25.77	--	--	--	--	--	--
Turbidity	*	NTU	12.80	33.3	28.6	90.4	18.00	20.9	20.9	22.9	21	NM	9.8	9.83	9.39	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																					
Carbon Dioxide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	1.1	18	16	10	17	16
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	1	3.9	3.8	4.9	4.0 N	4.0
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																					
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	2,500 U	**25**	25 U	25 U	**18 J**	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	0.57 J	< 5.0	< 5.0	< 5.0	< 5.0	**2,100**	**0.16 J**	1.0 U	1.0 U	**0.17 J**	**0.22 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	**290**	**0.11 J**	**0.29 J**	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.8 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	100 U	**4.0 J**	1.0 U	1.0 U	**0.29 J**	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	100 U	**0.2 J**	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	200 U	**0.13 J**	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																					
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**44**	10 U	10 U	14 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	**0.041 J***	**0.038 J**	**19**	10 U	**0.32 J**	14 U	10 U	**0.27 J**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**0.21**	10 U	10 U	14 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**0.28**	10 U	10 U	14 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	**0.38**	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.043	< 0.045	< 0.045	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.5**	10 U	10 U	14 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	**0.023 J***	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**2.3**	10 U	10 U	14 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	**0.23**	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Naphthalene	20	µg/L	**0.66**	< 0.50	< 0.50	< 0.50	< 0.22	< 0.20	**0.18 J**	< 0.099	**0.14 J**	< 0.19	< 0.20	**0.099 J**	**0.083 J**	**390**	10 U	10 U	14 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19 *	< 0.19	**2.2**	10 U	10 U	14 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.20	< 0.096	< 0.099	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	0.2 U	10 U	10 U	14 U	10 U	10 U
Inorganic Compounds																					
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	**3.1**	**0.1 B**	**0.029 B**	0.2 U	**0.71**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.010	< 0.010	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.648**	**0.657**	**0.666**	**0.654**	**0.63**	**0.78**	**0.68**	**0.63**	**0.68**	**0.63**	**0.65**	**0.67**	**0.71**	**0.32**	**0.59**	**0.56**	**0.61**	**0.52**	**0.53**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00029 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	0.004 U	0.0040 U	**0.00054 B**	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**27**	**61**	**57**	**69**	**59**	**56**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	**0.42**	**0.0024 J**	**0.0013 J**	**0.0091 J**	< 0.010	< 0.010	**0.0056 J**	< 0.010	0.01 U	**0.034**	0.01 U	0.01 U	0.01 UN	**0.0039 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	**0.0060 B**	**0.0042 B**	**0.0035 B**	**0.0044 B**	**0.0025 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0026 JB**	< 0.020	< 0.020	< 0.020	< 0.020	0.02 U	**0.0054 B**	0.02 U	0.02 U	0.02 UN	**0.0014 B**
Cyanide	0.2	mg/L	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**14**	**35**	**33**	**40**	**34**	**33**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.151**	**0.378**	**0.315**	**0.305**	**0.59**	**0.59**	**0.30**	**0.27**	**0.38**	**0.36**	**0.20**	**0.027 J**	**0.034 J**	0.04 U	**0.024 B**	**0.018 B**	**0.032 B**	**0.026 B**	**0.029 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.0**	**3.8**	**3.9**	**3.5**	**3.7**	**3.7**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.010	< 0.010	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**25**	**210**	**140**	**120**	**160**	**150**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.001 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	**0.010**	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	**0.0055 B**	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	**0.099**	< 0.0087	**0.0087 J**	**0.0099 J**	< 0.020	< 0.020	**0.011 J**	< 0.020	**0.051**	**0.0067 B**	**0.009 B**	0.02 U	0.02 U	**0.0076 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-307D																																
			1/29/2015	7/15/2014	1/7/2014	7/10/2013	1/8/2013	7/23/2012	1/16/2012	7/6/2011	1/18/2011	7/14/2010	1/7/2010	7/21/2009	1/19/2009	7/16/2008	1/9/2008	7/11/2007	2/14/2007	7/12/2006	1/11/2006	7/22/2005	1/19/2005	7/16/2004	1/23/2004	7/17/2003	1/15/2003	1/03 DUP	7/9/2002	1/16/2002	7/10/2001	1/22/2001
			Post-ISCO																			Pre-ISCO													
Field Parameters																																			
Conductivity	*	mS/cm	0.457	0.55	0.546	0.446	0.536	0.392	0.498	0.498	0.457	0.490	0.411	0.487	0.534	0.574	0.622	0.456	0.563	0.505	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.64	0.34	0.13	0.12	0.31	0.40	1.91	2.02	0.67	0.29	1.2	0.25	0.27	0.3	0.21	0.22	0.25	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	1.9	-70.6	-57.0	-30.3	-30.2	-25.6	-74.6	-43.1	-53.7	-56.8	-0.6	-29.9	-64.6	-88.8	-74.4	-67.4	-84.5	-65.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.43	6.58	6.47	6.76	6.47	6.25	6.36	6.58	6.57	6.24	6.01	6.38	6.26	6.21	6.25	6.33	6.42	6.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	19.53	22.36	19.99	22.26	19.98	23.40	20.27	21.22	18.21	22.02	17.98	20.74	19.7	21.17	20.40	22.15	19.14	22.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	4.28	1.87	4.91	2.82	0.72	5.02	9.70	1.81	3.34	9.7	3.57	4.9	7.76	3.87	4.90	4.8	1.43	1.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																			
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.2	16.8	15	15	28	2.3	1.7	3.6	1.5	1.8	1.7	0.31 N		
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.499	0.616	0.62	0.68	1.2	0.33	0.21	2.0	0.17	0.27	0.37	0.49		
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	<100	< 5.0	< 5.0	< 5.0	< 5.0	**7.5 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U	1.0 U	1.0 U	**0.18 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**	
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.3 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	**3.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	0.002 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.057**	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.044	< 0.050	< 0.049	< 0.049	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	**0.35**	< 0.19	< 0.19	< 19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**11**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19 *	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	**0.079**	< 0.050	**0.065**	< 0.050	<0.20	< 0.098	< 0.11	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																			
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.048 B**	**0.11 B**	0.2 U	**0.11 B**	**2.1**	0.2 U			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.020 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U		
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U		
Barium	2	mg/L	**0.0712**	**0.258**	**0.0751**	**0.0638**	**0.29**	**0.061**	**0.068**	**0.064**	**0.061**	**0.065**	**0.062**	**0.065**	**0.069**	**0.072**	**0.147**	**0.0767**	**0.112**	**0.112**	0.2 U	**0.126**	**0.1**	**0.098**	**0.15**	**0.07**	**0.065**	**0.14**	**0.068**	**0.12**	**0.1**	**0.1**			
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U		
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	**0.00091 B**	0.005 U	0.005 U	0.005 U			
Calcium metal	*	mo/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40**	**44.6**	**33**	**35**	**49**	**28**	**24**	**70**	**21**	**31**	**30**	**30**			
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	**0.0030 J**	< 0.010	< 0.010	**0.0015 J**	**0.0016 J**	**0.0178**	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	**0.010**	0.01 U	**0.004 B**	**0.0034 B**	0.01 U				
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0028 B**	**0.0059 B**	**0.0024 B**	**0.002 B**	**0.0023 B**	**0.0016 B**			
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0165**	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0011 B**	**0.0010 B**	**0.0012 B**	0.02 U	**0.0021 B**	0.02 U			
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0089 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U			
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0184**	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.0050 U	0.005 U	0.005 U	**0.0015 B**	0.005 U			
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.5**	**26.2**	**22**	**23**	**19**	**23**	**19**	**43**	**18**	**25**	**22**	**23**			
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00091	< 0.00091	< 0.00091	< 0.00091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.102**	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.00020 U	0.00020 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U			
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0049 J**	**0.0059 J**	**0.0045 J**	< 0.0023	**0.0093 J**	< 0.040	< 0.040	**0.0030 J**	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.21**	**0.11**	**0.0083 B**	**0.1**	0.11	**0.0064 B**	**0.0067 B**		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**19.8**	**6.01**	**2.8**	**2.2**	**11**	**0.8**	**0.62 B**	**3.0**	**0.73 B**	**1**	**1.2**	**1.1**		
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	**0.0073 J**	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U			
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**34.5**	**85.6**	**62**	**54**	**49**	**54**	**51**	**140**	**60**	**78**	**62**	**62**			
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.0020 UWN	0.002 UWN	0.002 U	0.002 U	0.002 UW			
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0172**	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	**0.0055 B**	0.01 U			
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0554**	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	0.02 U	0.02 U	**0.0059 B**	0.02 U			

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Orqanic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-307SAP																								
		Sample Date	1/13/2015	7/15/2014	1/7/2014	7/10/2013	1/9/2013	7/24/2012	1/16/2012	7/6/2011	1/18-20/2011	1/7/2010	7/21/2009	1/15/2009	7/16/2008	1/9/2008	7/12/2006	1/11/2006	7/22/2005	1/19/2005	7/16/2004	1/23/2004	7/17/2003	7/9/2002	1/16/2002	7/10/2001	1/22/2001
		Unit	Post-ISCO																Pre-ISCO								
Field Parameters																											
Conductivity	*	mS/cm	0.564	0.616	0.673	0.632	0.525	0.617	0.580	0.728	--	0.67	0.78	0.768	0.742	0.769	0.937	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.37	0.48	6.09	0.34	8.33	10.52	0.88	0.27	--	3.93	0.7	0.85	1	1.13	0.56	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	34.3	-13.4	-8.0	28.7	-10.9	7.2	-0.5	55.2	--	19.1	87.9	138.9	79.4	147.2	14.8	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.06	6.46	7.02	6.44	6.73	6.69	6.39	6.35	--	6.2	6.29	6.05	6.14	6.06	6.22	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.6	23.9	15.61	22.58	16.89	28.44	18.17	28.54	--	17.23	21.83	15.7	22.43	19.81	22.59	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.39	0.47	3.33	0.58	2.23	26.1	1.17	0.65	--	4.01	4.5	0.35	1.08	2.10	0.47	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																											
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.37	2.75	3	3.3	4.4	3	3.3	4.3	3.4	4.1
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.37	1.37	1.6	1.8	2	2.1	2	2.1	2.7	3.3
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	0.55 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	**0.16 J**	**0.34 JB**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.9 J**	1.0 U	
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.34 J**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.18 J**	2.0 U	2.0 U
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.20	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.25 J**	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	**0.16 J**	< 0.10	**0.48**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.054**	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.29**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.63**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	**1.0**	< 0.10	**0.52**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.27**	< 0.19	< 0.20	< 0.19	< 0.10	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	**0.82**	< 0.10	**0.23**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	**0.40**	< 0.10	**0.31**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.049	< 0.050	< 0.045	**0.49**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.20	< 0.19	< 0.20	< 0.19	< 0.10	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	< 0.19	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.88**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	--	< 0.11	< 0.11	< 0.10	< 0.20	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	**0.79**	< 0.10	**0.25**	< 0.19	< 0.20	< 0.19	< 0.050	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	**0.11 J**	< 0.10	< 0.20	< 0.19	**0.063 JB**	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.99 J**	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**1.1**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	**0.92**	< 0.19	< 0.20	< 0.19	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.258**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.038 B**	**0.14 B**	**0.065 BN**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0032 B**	0.01 U	**0.0039 B**	0.01 U
Barium	2	mg/L	**0.0649**	**0.071**	**0.0697**	**0.0692**	**0.068**	**0.066**	**0.076**	**0.070**	**0.065**	**0.078**	**0.078**	**0.08**	**0.066**	**0.0731**	**0.0996**	0.2 U	**0.0985**	**0.12**	**0.14**	**0.15**	**0.16**	**0.15**	**0.18**	**0.2**	**0.23**	
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00021 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00078 B**	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**45.9**	**53.9**	**57**	**65**	**74**	**74**	**69**	**73**	**110**	**110**	
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0047 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0039 B**	**0.01**	0.01 U	
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0059 B**	**0.0062 B**	**0.0066 B**	**0.0075 B**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	0.0036 JB	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0015 B**	
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0094 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**29.7**	**32.1**	**35**	**39**	**44**	**50**	**43**	**44**	**67**	**70**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.00020 U	0.00020 U	
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0032 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	**0.0027 J**	**0.0033 J**	< 0.0200	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.011 B**	**0.026 B**	**0.070**	**0.02 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**4.43**	**4**	**3.1**	**3.5**	**3.7**	**3.2**	**2.5**	**3.8**	**3.7**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**104**	**107**	**120**	**140**	**150**	**190**	**130**	**130**	**190**	**180**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 U	0.002 UW	0.002 U	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.011 J**	**0.0087 J**	< 0.020	< 0.020	< 0.020	**0.0086 J**	< 0.0200	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.0064 B**	**0.0066 B**	**0.0071 B**	**0.0074 B**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309D																	
		Sample Date	7/21/2009	1/20/2009	7/17/2008	1/9/2008	7/12/2007	2/14/2007	7/12/2006	1/11/2006	7/21/2005	1/20/2005	7/15/2004	1/20/2004	7/16/2003	1/16/2003	7/10/2002	1/15/2002	7/12/2001	1/24/2001
		Unit	Post-ISCO								Pre-ISCO									
Field Parameters																				
Conductivity	*	mS/cm	1.088	0.952	1.254	1.118	1.145	1.187	1.143	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.78	1.36	0.27	0.47	0.41	0.26	0.24	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-173.9	35.7	-6.0	-21.0	18.5	-16.0	-8.2	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.05	5.26	5.97	6.07	5.99	6.15	6.10	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	22.34	14.82	23.69	21.92	22.20	20.96	22.57	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	--	4.2	1.17	0.81	0.00	0.73	0.63	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																				
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	12.4	11.4	15	15	16	15	18	18	16 N	17	15
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	1.08	0.985	1.1	1.1	1.1	1	1.2	1.1	1.1	1.2	1.1
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	**0.37 J**	**0.42 J**	< 5.0	< 5	< 5	**22**	**6.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	**0.69**	**0.4**	**0.8**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	**0.27**	**0.14 J**	**0.26**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	**0.022 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	**0.034 J**	**0.023 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**0.29**	**0.14 J**	**0.21**	< 10	< 10	< 10	10 U	**4.2**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.19	**0.023 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.062 B**	0.2 U	**0.041 BN**	**0.11 B**	**0.048 B**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.28**	**0.27**	**0.29**	**0.324**	**0.333**	**0.363**	**0.345**	**0.366**	**0.375**	**0.4**	**0.4**	**0.38**	**0.34**	**0.34**	**0.3**	**0.30**	**0.29**	**0.26**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**44.7**	**42.1**	**47**	**44**	**43**	**38**	**41**	**37**	**33**	**37**	**33**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.0017 B**	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	**38.7**	**35.5**	**40**	**37**	**36**	**34**	**34**	**29**	**27**	**30**	**25**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	**0.0001 J**	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	5 U	**2.89**	**3.9**	**3.5**	**3.4**	**2.6**	**3.3**	**3.3**	**3.0**	**3.2**	**3.2**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**116**	**108**	**110**	**100**	**91**	**86**	**86**	**76**	**80**	**77**	**79**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.0020 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	**0.0088 J**	**0.0089 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309SAP				
		Sample Date	1/16/2003	7/10/2002	1/16/2002	7/12/2001	1/24/2001
		Unit	Pre-ISCO				
Field Parameters							
Conductivity	*	mS/cm	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	--	--	--	--	--
pH	*	SU	--	--	--	--	--
Oxidation Reduction Potential	*	mV	--	--	--	--	--
Temperature	*	Celsius	--	--	--	--	--
Turbidity	*	NTU	--	--	--	--	--
Monitored Natural Attenuation Parameters							
Carbon Dioxide	*	µg/L	--	--	--	--	--
Iron	*	mg/L	6.0	7.2	3.6	8.5	9.7
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--
Manganese, Total	*	mg/L	1.1	1.1	1.5	1.2	1.2
Manganese, Dissolved	*	mg/L	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--
Volatile Organic Compounds							
Acetone	4,000	µg/L	**32**	< 25	< 25	**53**	< 25
Benzene	5	µg/L	**0.17 J**	< 1.0	< 1.0	< 1.0	**0.21 J**
Carbon Disulfide	4,000	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**0.38 J**
Toluene	1,000	µg/L	**0.36 J**	**0.37 J**	< 1.0	**0.65 J**	**3.2**
Trichloroethylene	5	µg/L	**0.22 J**	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, total	2,000	µg/L	< 2.0	< 2.0	< 2.0	< 2.0	**0.57 J**
Semivolatile Organic Compounds							
2-Methylnaphthalene	*	µg/L	< 10	**0.36 J**	< 13	< 10	< 10
Acenaphthene	2,000	µg/L	< 10	< 10	< 13	< 10	< 10
Acenaphthylene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Anthracene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(a)pyrene	0.2	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(b)fluoranthene	0.2	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(g,h,i)perylene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Chrysene	0.2	µg/L	< 10	< 10	< 13	< 10	< 10
Dibenzo(a,h)anthracene	0.3	µg/L	< 10	< 10	< 13	< 10	< 10
Dibenzofuran	1	µg/L	< 10	< 10	< 13	< 10	< 10
Fluoranthene	1,000	µg/L	< 10	< 10	< 13	< 10	< 10
Fluorene	1,000	µg/L	< 10	< 10	< 13	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 10	< 10	< 13	< 10	< 10
Naphthalene	20	µg/L	< 10	**5.3 J**	< 13	< 10	< 10
Phenanthrene	10	µg/L	< 10	< 10	< 13	< 10	< 10
Pyrene	1,000	µg/L	< 10	< 10	< 13	< 10	< 10
Inorganic Compounds							
Aluminum (fume or dust)	*	mg/L	**0.15 B**	**0.032 B**	**0.03 B**	**0.11 B**	**0.54**
Antimony	0.01	mg/L	< 0.020	< 0.02	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Barium	2	mg/L	**0.20**	**0.19**	**0.23**	**0.2**	**0.2**
Beryllium	0.004	mg/L	< 0.0040	< 0.004	< 0.004	< 0.004	< 0.004
Cadmium	0.005	mg/L	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005
Calcium metal	*	mg/L	**17**	**17**	**19**	**19**	**19**
Chromium	0.1	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	**0.0025 B**
Cobalt	*	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Copper	1.3	mg/L	< 0.020	< 0.02	< 0.02	< 0.02	**0.002 B**
Cyanide	0.2	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	--
Lead	0.015	mg/L	< 0.0050	**0.0038 B**	< 0.005	< 0.005	< 0.005
Magnesium	*	mg/L	**8.4**	**8.5**	**9.6**	**9.6**	**9.2**
Mercury	0.002	mg/L	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.00020
Nickel	0.1	mg/L	**0.020 B**	**0.021 B**	**0.035 B**	**0.031 B**	**0.031 B**
Potassium	*	mg/L	**2.0**	**2.2**	**2.2**	**2.2**	**2.2**
Selenium	0.05	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Sodium	*	mg/L	**39**	**37**	**42**	**40**	**36**
Thallium	0.002	mg/L	< 0.0020 WN	< 0.002WN	< 0.002	< 0.002W	< 0.002
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	2	mg/L	**0.0071 B**	**0.011 B**	**0.0085 B**	< 0.02	**0.0094 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-310SAP																													
			1/13/2015	7/16/2014	1/14/2014	7/9/2013	1/9/2013	7/24/2012	1/24/2012	7/6/2011	1/17/2011	7/15/2010	1/6/2010	7/21/2009	1/14/2009	7/22/2008	1/10/2008	7/10/2007	2/15/2007	7/11/2006	2/8/2006	1/14/2006	7/20/2005	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/15/2002	7/12/2001	1/23/2001
			Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.458	0.464	0.432	0.517	--	0.533	0.451	0.509	0.366	0.427	0.319	0.423	0.402	0.496	0.516	0.417	0.426	0.47	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.33	1.78	1.34	1.96	--	2.94	5.81	1.07	1.99	3.05	2.92	1.45	1.32	1.85	0.59	0.64	0.81	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	174.7	166.1	182.7	-12.8	--	140.0	115.4	145.6	213.4	-48.4	43.3	133.9	143.1	110.2	188.9	194.7	162.1	163.4	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.61	5.69	5.93	6.00	--	5.80	6.01	5.79	5.8	6.24	5.84	5.83	5.98	6.3	5.87	5.67	6.13	6.14	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.5	23.29	17.45	20.61	--	26.80	21.16	28.94	13.38	25.06	13.62	24.02	18.89	24.04	19.17	24.49	15.24	24.08	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	0.77	0.69	4.65	7.61	--	1	1.54	1.71	1.42	9.3	1.62	4	3.83	2.12	3.00	1.57	1.61	2.09	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	61.1	132	122	118	70	73	1,200 B *	940 * B	740 *	730 B	800	940 *	570	--	< 1000	< 1000	--	770	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.637	--	1.02	0.1 U	0.074	0.05 U	0.058	0.04 U	0.043 BN	0.04 B	0.15
Iron, as Ferrous (Fe+2)	*	mg/L	< 1.0	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	--	< 0.10	< 0.1	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.286	--	0.247	0.254	0.23	0.21	0.19	0.19	0.25	0.31	0.39
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.244	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	< 4	0.62	< 0.58	< 0.29	0.36 J	0.28	0.26	0.43	0.37	0.38	--	0.34	1.1	0.77	0.99	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	9.8	10	10	10.0	10 H	11 E	9.9	11	46	44	48	41	10	--	13	9.8	9.3	8	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.96 H	8.26 H	6.99 H	8.68 H	5.2	7.0	2.1	1.6	1.5	1.6	1.4	1.2	1.3	--	2.1	6.4	3.3	2.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	24	19	25	23	19	22	20	21	20	21	15	17	17	--	29	22	19	17	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**16 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	--	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**22 J**		
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.58 J**	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U		
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.35 J**	1.0 U		
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.13 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.0 J**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U		
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	--	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.044	< 0.044	< 0.047	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Naphthalene	20	µg/L	< 500	**0.53**	**0.68**	< 0.50	<0.23	< 0.19	**0.11 J**	< 0.098	< 0.10	**1.1**	< 0.20	< 0.19	< 0.19	**0.050 J**	< 10	< 10	< 10	10 U	0.0002 U	**0.25**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Phenanthrene	10	µg/L	< 0.050	**0.05**	<0.50	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.23	< 0.19	< 0.098	< 0.098	< 0.10	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.451**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.070 BN**	**0.035 B**	**0.047 BN**		
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.0055 J**	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U		
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	**0.0063 J**	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U		
Barium	2	mg/L	**0.0749**	**0.0696**	**0.0747**	**0.0823**	**0.078**	**0.081**	**0.074**	**0.074**	**0.080**	**0.065**	**0.072**	**0.065**	**0.07**	**0.074**	**0.0759**	**0.0761**	**0.0656**	**0.0699**	--	0.2 U	**0.0583**	**0.066**	**0.061**	**0.059**	**0.05**	**0.051**	**0.054**	**0.05**		
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U		
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	--	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U		
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.8**	**12.4**	**12**	**12**	**12**	**11**	**11**	**12**	**13**		
Chromium	0.1	mg/L	**0.0117**	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0014 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	**0.006**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U		
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U		
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0030 J**	< 0.0019	< 0.0019	**0.0024 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	**0.0149**	< 0.010	0.01 U	--	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0019 B**	**0.0015 B**	**0.0029 B**		
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0065 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	--		
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0024 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U		
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.03**	**7.97**	**7.5**	**7.7**	**7.6**	**6.9**	**6.6**	**7.3**	**7.5**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U		
Nickel	0.1	mg/L	**0.336**	**0.0756**	**0.0628**	**0.0621**	**0.082**	**0.066**	**0.099**	**0.11**	**0.13**	**0.15**	**0.19**	**0.22**	**0.17**	**0.16**	**0.132**	**0.214**	**0.270**	**0.356**	--	**0.211**	**0.179**	**0.091**	0.04 U	0.04 U	0.04 U	**0.029 B**	**0.038 B**	**0.083**		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.76**	**4.2**	**3.6**	**3.7**	**4**	**3.2**	**3.6**	**3.7**		
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0039 J**	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0042 B**	0.01 U		
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**65.2**	**59.7**	**68**	**68**	**83**	**80**	**89**	**94**	**86**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 U	0.002 UW	0.002 U		
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U		
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.020**	< 0.020	**0.011 J**	**0.013 J**	**0.014 J**	**0.014 J**	< 0.010	**0.026**	**0.023**	**0.010 J**	< 0.0200	**0.132**	< 0.02	0.02 U	--	0.02 U	**0.0265**	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.0073 B**	**0.0075 B**		

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-311																									
		Sample Date	1/15/2015	7/17/2014	1/9/2014	7/11/2013	1/9/2013	7/26/2012	1/18/2012	7/7/2011	1/19/2011	7/14/2010	1/6/2010	7/23/2009	1/14/2009	7/16/2008	1/8/2008	7/11/2007	2/15/2007	2/07 DUP	7/11/2006	7/21/2005	7/21/2005	7/10/2002	1/16/2002	7/18/2001	1/24/2001
		Unit	Post-ISCO																			Pre-ISCO						
Field Parameters																												
Conductivity	*	mS/cm	0.426	0.311	0.265	0.343	0.454	0.406	0.309	0.376	0.54	0.251	0.232	0.857	0.83	0.647	0.539	1.041	1.013	1.013	1.101	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.43	0.43	1.50	2.30	0.48	2.22	6.80	0.94	5.71	0.84	0.21	5.25	6.15	0.27	0.42	0.08	2.49	2.49	0.19	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-111.5	-142.3	-80.5	-104.0	-15.7	-22	-32.8	-11.7	132	18	11.1	-155.5	-27.3	-176.4	-50.1	-212.4	-65.3	-65.3	-102.9	--	--	--	--	--	--
pH	*	SU	6.24	6.42	6.54	6.36	6.29	5.89	6.73	6.45	0.475	6.09	6.99	6.79	0.751	6.27	6.52	6.79	6.92	6.92	6.59	--	--	--	--	--	--
Temperature	*	Celsius	13.9	22.24	19.58	22.64	22.84	26.49	18.61	23.51	18.5	23.5	12.54	32.34	19	23.39	21.73	23.42	16.93	16.93	26.12	--	--	--	--	--	--
Turbidity	*	NTU	8.61	23.2	9.89	115	2.47	6.23	11.0	--	11	4.48	3.55	9.66	2.1	6.43	5.56	3.6	4.93	4.93	3.14	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																												
Carbon Dioxide	*	µg/L	329	325	179	282	69	110	560 B	1,600 B	1,800	580 B	350	750	1,800	1,100	< 1000	< 1000	--	--	750	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.92	4.67	4.45	13	110	57	23
Iron, as Ferrous (Fe+2)	*	mg/L	4.15	6.29	0.761 H	9.08 H	0.67 HF	0.60 HF	0.49 HF	1.0 HF	3.6 HF	0.033 JHF	0.17 HF	< 0.10 HF	1.6 HF	0.15	1.33	2.19	5.09	5.2	5.79 H	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.07	1.21	1.14	1.5	1.8	2.0	1.7
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.886	--	--	--	--	--	--
Methane	*	µg/L	410	380	190	240	7.8	230	17	330	400	1.9	15	75	500	65	1,500	1,400	1,300	1,100	1.6	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	< 0.25	1.0	< 0.25	0.37	< 0.075	< 0.36	0.49 J	< 1.1	< 1.1	0.069	<0.50	< 0.25	< 0.25	< 0.25	< 0.25	0.25 U	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.57	--	--	--	--	--	--
Oxygen	*	mg/L	7.20 H	7.29 H	7.91 H	6.31 H	5.6	4.8	1.4	1.3	1.3	1.6	1.5	1.1	1.1	1.1	1.2	1.2	2	2.5	5.3	--	--	--	--	--	--
Sulfate	*	mg/L	< 1.0	6.1	4.5	14	18	5.1	5.4	5.6	38	35	14	73	94	45	50	84	5.7	4.3	1 U	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 25	< 5.0	**11 J**	< 100	< 100	< 200	< 100	< 50	< 50	< 50 R	< 50	50 U	310 U	180 U	250 U	500 U	2,500 U	2,500 U
Benzene	5	µg/L	**370**	**21**	**14**	< 5.0	**72**	**46**	**26**	**420**	**71**	**3.6 J**	**9.5**	**19**	**84**	**130**	**730**	**9,600**	**4,100**	**3,800**	**11,000**	**870**	**880**	**35**	**150**	**30,000 D**	**34,000 D**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 3.0	< 0.60	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5	< 5	< 5	5 U	120 U	7.1 U	10 U	20 U	100 U	100 U
Ethylbenzene	700	µg/L	**94**	< 5.0	< 5.0	< 5.0	**13**	**9.4**	**12**	**64**	**6.3**	**0.44 J**	< 5.0	< 5.0	**71**	**290**	**2,500**	**1,700**	**750**	**710**	**1,800**	**530**	**520**	**740**	**2,300**	**1,900**	**2,900**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 1.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5	< 5	< 5	5 U	62 U	36 U	50 U	100 U	500 U	500 U
Toluene	1,000	µg/L	**9.6**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.45 J**	**11 J**	**1.5 J**	< 5.0	< 5.0	< 5.0	**0.68 J**	**1.2 J**	**190**	**200**	**35**	**32**	**70**	**23**	**22**	**21**	**22**	**47 J**	**310**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.65	< 0.13	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5	< 5	< 5	5 U	120 U	7.1 U	10 U	20 U	100 U	100 U
Xylenes, total	2,000	µg/L	**41**	< 5.0	< 5.0	< 5.0	**9.2**	**7.5**	**4.8 J**	**59**	**4.9 J**	< 5.0	< 5.0	< 5.0	**10**	**9.6**	**550**	**320**	**230**	**220**	--	**96**	**96**	**54**	**69**	**210**	**420**
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**63**	**51**	**71**	**280**	**270**	**470**
Acenaphthene	2,000	µg/L	**13**	**3.2**	**7.2**	**6.9**	**4.4**	**4.2**	**35**	**14**	**15**	< 0.19	**2.0**	**7.7**	**20 J**	**0.49**	< 10	**51**	**22**	**23**	**79**	**45**	**38**	**24**	**68**	**72**	**100**
Acenaphthylene	10	µg/L	**3.2**	< 1.0	**1.2**	**1.2**	< 2.2	**0.55**	**3.1**	**3.7**	**2.9**	< 0.19	**0.33**	**1.5**	< 39	**0.82**	< 10	< 10	< 10	< 10	10 U	10 U	16 U	**3.2 J**	20 U	50 U	**25 J**
Anthracene	10	µg/L	**0.56**	**0.32**	**0.51**	**0.49**	< 2.2	< 0.22	**1.1 J**	**0.77**	**0.34**	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Benz(a)anthracene	0.1	µg/L	< 0.050	0.067	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 0.48	< 0.050	< 0.043	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	10 U	16 U	10 U	20 U	50 U	50 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10 U	16 U	**0.81 J**	**2.8 J**	**2.6 J**	**5.1 J**
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Fluorene	1,000	µg/L	**5.5**	**1.5**	**4.1**	**3.9**	< 2.2	**2.0**	**13**	**13**	**5.2**	< 0.19	**0.57**	**1.5**	**5.5 J**	< 0.19	**10**	< 10	< 10	< 10	**12**	10 U	16 U	**3.3 J**	**8.2 J**	**9.2 J**	**13 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	10 U	16 U	10 U	20 U	50 U	50 U
Naphthalene	20	µg/L	**560**	**12**	**12**	**5.5**	**55**	< 0.22	**1.200 D**	**1.1**	**71**	**0.13 J**	**5.1**	**2.3**	**1,400**	**0.75**	**5,100**	**2,200**	< 10	< 10	**2,000**	**2,100**	**1,700**	**1,300 D**	**3,500 D**	**4,800 D**	**6,700 D**
Phenanthrene	10	µg/L	**3.3**	**1.1**	**3.1**	**2.7**	< 2.2	**0.82**	**10**	**5.4**	**3.5**	< 0.19	**0.26**	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	**1.1 J**	**3.8 J**	50 U	**4.1 J**
Pyrene	1,000	µg/L	< 0.050	**0.07**	< 0.050	< 0.050	< 2.2	< 0.22	< 1.1	< 0.11	< 0.095	< 0.19	< 0.19	< 0.19	< 39	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	16 U	10 U	20 U	50 U	50 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	**0.13 B**	**63**	**20**	**4.0**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0049 J**	< 0.0046	--	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	**0.0089 B**	**0.0039 J**	0.01 U
Barium	2	mg/L	**0.185**	**0.304**	**0.0281**	**0.145**	**0.048**	**0.059**	**0.060**	**0.11**	**0.21**	**0.020**	**0.031**	**0.20**	**0.26**	**0.12**	**0.343**	**0.306**	**0.288**	**0.294**	**0.314**	**0.343**	**0.323**	**0.077**	**0.34**	**0.22**	**0.17**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00026 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.004 U	0.004 U	0.004 U	**0.005**	**0.0012 J**	0.004 U
Cadmium	0.005	mg/L	< 0.005	**0.0133**	**0.0600**	**0.0240**	**0.034**	**0.023**	**0.028**	**0.017**	**0.0053**	**0.0076**	**0.043**	**0.018**	**0.0076**	**0.042**	< 0.0050	**0.0073**	**0.0051**	< 0.005	0.005 U	0.005 U	0.005 U	0.005 U	**0.0018 B**	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**38.3**	**35.9**	**44**	**48**	**57**	**53**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	**0.084**	**0.038**	**0.0042 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U	0.01 U	**0.028**	**0.0092 J**	**0.0039 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	0.0030 JB	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.02 U	0.02 U	0.02 U	**0.29**	**0.088**	**0.013 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0082 J**	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0088 J**	**0.006 J**	**0.049**	**0.054**	**0.022**	**0.012**	**0.019**	**0.0136**	0.01 U	**0.022**	**0.015**	**0.016**	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0023 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.005 U	0.005 U	**0.0017 B**	**0.044**	0.015 U	**0.0032 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**20.2**	**19**	**24**	**28**	**31**	**28**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00017 B**	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.018 J**	**0.011 J**	< 0.0023	**0.0046 J**	< 0.040	< 0.040	**0.0027 J**	**0.0025 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	**0.047**	**0.026 J**	**0.0072 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.62**	**3.37**	**4.5**	**7.3**	**6.6**	**8.8**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**188**	**175**	**140**	**130**	**170**	**170**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	0.001 U	0.001 U	0.001 U	0.002 UWN	0.002 U	**0.0017 B**	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0027 J**	**0.0038 J**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	**0.0018 J**	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	**0.36**	**0.097**	**0.013**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.024**	< 0.020	**0.016 J**	**0.012 J**	< 0.0087	**0.020**	< 0.020	< 0.020	**0.021**	**0.011 J**	< 0.0200	**0.0385**	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	**0.26**	**0.096**	**0.038**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-312																				MW-314	MW-316
			7/22/2009	1/14/2009	7/21/2008	1/8/2008	7/12/2007	2/13/2007	7/12/2006	1/10/2006	7/19/2005	1/19/2005	1/05 DUP	7/14/2004	1/21/2004	7/20/2003	1/16/2003	7/10/2002	1/18/2002	7/16/2001	1/19/2001		10/5/2006	10/4/2006
			Post-ISCO								Pre-ISCO												Post-ISCO	Post-ISCO
Field Parameters																								
Conductivity	*	mS/cm	0.474	1.19	0.548	0.692	0.411	0.365	0.221	--	--	--	--	--	--	--	--	--	--	--	--		2.28	0.513
Dissolved Oxygen (YSI)	*	mg/L	2.25	6.45	0.68	0.27	0.58	3.20	1.07	--	--	--	--	--	--	--	--	--	--	--	--		0.15	0.47
Oxidation Reduction Potential	*	mV	-52.7	-47.8	-64.6	-93.1	-33.2	-7.8	20.2	--	--	--	--	--	--	--	--	--	--	--	--		-60.6	-112.7
pH	*	SU	6.92	0.539	7.03	6.61	7.62	7.16	6.45	--	--	--	--	--	--	--	--	--	--	--	--		6.25	6.81
Temperature	*	Celsius	30.67	18.27	28.11	23.69	23.59	22.53	24.72	--	--	--	--	--	--	--	--	--	--	--	--		23.94	25.53
Turbidity	*	NTU	7.99	3.2	8.62	1.25	0.56	1.04	0.00	--	--	--	--	--	--	--	--	--	--	--	--		8.41	0.68
Monitored Natural Attenuation Parameters																								
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Iron	*	mg/L	--	--	--	--	--	--	--	0.936	0.189	0.29	0.27	0.54	0.72	0.17	2.2	2.5	6.1	10	11 N		--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	0.371	0.0564	0.097	0.11	0.11	0.31	0.04 U	0.39	0.44	0.77	0.89	1.6		--	--
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
Volatile Organic Compounds																								
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	< 50	**10**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U		50 U	50 R
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	13000
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	5 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**1.2 J**		5 U	5 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	1700
Toluene	1,000	µg/L	< 5.0	**0.32 J**	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	**2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		5 U	26
Trichloroethylene	5	µg/L	< 5.0	**0.44 J**	< 5.0	< 5.0	< 5	< 5	< 5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.46 J**	**0.73 J**	**0.64 J**	**0.82 J**	**1.3**		5 U	5 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		5 U	860
Semivolatile Organic Compounds																								
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		--	--
Acenaphthene	2,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	43
Acenaphthylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.1 U	0.1 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.1 U	0.1 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		--	--
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		0.05 U	0.05 U
Naphthalene	20	µg/L	< 0.19	**0.036 J**	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	1400
Phenanthrene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U
Inorganic Compounds																								
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.18 B**	0.2 U	**0.31**	**1.9**	**0.57**		--	--
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.01 U	0.006 U	0.02 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U		0.05 U	0.05 U
Barium	2	mg/L	**0.26**	**0.38**	**0.23**	**0.364**	**0.191**	**0.176**	**0.137**	0.2 U	**0.122**	**0.14**	**0.14**	**0.15**	**0.15**	**0.15**	**0.16**	**0.17**	**0.18**	**0.22**	**0.3**		**0.958**	**0.572**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U		0.01 U	0.01 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**19.8**	**20.9**	**25**	**25**	**22**	**23**	**25**	**22**	**20**	**18**	**21**	**33**		--	--
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	**0.0036 B**	0.01 U		0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0046 B**	**0.0076 B**	**0.0084 B**		--	--
Copper	1.3	mg/L	< 0.020	**0.0028 J**	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0021 B**	0.02 U	0.0034 U	**0.0079 B**	**0.0087 B**		0.01 U	0.01 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0019 B**	0.0033 U	0.005 U	0.005 U		0.01 U	0.01 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	**9.07**	**8.99**	**9**	**8.9**	**9.1**	**9.4**	**8.2**	**9.0**	**9.1**	**8.5**	**9.5**	**14**		--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U		0.0002 U	0.0002 U
Nickel	0.1	mg/L	< 0.040	< 0.040	**0.0022 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U		0.02 U	0.02 U
Potassium	*	mg/L	--	--	--	--	--	--	--	5 U	**2.73**	**4.5**	**4.6**	**2.8**	**2.7**	**4.6**	**8.9**	**3.3**	**1.8**	**2.5**	**11**		--	--
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.0058 U	0.01 U	0.01 U		0.02 U	0.02 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**13.8**	**15.1**	**15**	**14**	**15**	**14**	**15**	**15**	**14**	**13**	**14**	**25**		--	--
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 0.0010	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 UJ	0.002 U	0.002 U		0.001 U	0.001 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.0053 U	**0.023**	**0.0065 B**		0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	**0.012 J**	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.020	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.04**	**0.0074 B**	**0.0071 B**	**0.019 B**	**0.013 B**	**0.018 B**		0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-401D																																			
		Sample Date	1/14/2015	7/17/2014	1/13/2014	7/10/2013	1/9/2013	7/24/2012	1/18/2012	7/6/2011	1/19/2011	7/20/2010	1/6/2010	7/23/2009	1/13/2009	7/17/2008	1/8/2008	7/11/2007	2/13/2007	7/13/2006	1/13/2006	7/19/2005	7/05 DUP	1/18/2005	1/05 DUP	7/12/2004	7/04 DUP	1/23/2004	1/04 DUP	7/15/2003	7/03 DUP	1/16/2003	1/03 DUP	7/16/2002	1/16/2002	7/17/2001	1/24/2001
		Unit	Post-ISCO																			Pre-ISCO																
Field Parameters																																							
Conductivity	*	mS/cm	0.513	0.316	0.248	0.286	0.245	0.278	0.245	0.313	1.6	0.323	0.278	0.285	0.9	0.375	0.377	0.352	0.419	0.338	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.33	1.28	0.99	1.60	0.45	1.25	0.58	0.94	6.21	0.71	0.51	4.54	5.82	0.79	0.40	0.43	1.30	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-41.9	193.2	151.9	126.4	168.0	344.0	232.7	107.1	236.7	-7.4	-16.9	-228	281.3	116.3	290.3	247.3	230.4	218.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.17	6.04	6.03	6.13	6.13	6.15	2.89	5.71	0.313	6.06	6.16	5.94	0.348	5.92	5.97	5.94	5.91	5.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	14.7	21.69	19.99	21.11	20.41	24.68	20.42	26.64	20.07	23.18	17.02	21.98	20.11	21.33	20.57	21.90	21.22	20.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	5.05	1.16	7.97	1.11	1.70	1.33	0.79	8.67	0.36	2.1	2.08	0.71	3.1	2.87	0.91	0.71	0.34	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																							
Carbon Dioxide	*	µg/L	95.9	126	130	107	52	36	1,000 B	840 * B	620	810	800	810	600	780	< 1000	< 1000	--	850	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.053	0.056	0.078	0.054	0.079	0.051	0.27	0.04 UJ	0.050 U	0.050 U	0.049 B	12	1.2	0.4
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.065 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.228	0.141	0.354	0.334	0.13	0.14	2.7	2.8	8.9	9.1	0.55	7.6	9.7	9.8	9.4	10	2.9	6.6
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.194	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	7	8	<4	2.9	< 0.58	12	5.3	9.7	4.4	5.0	9.8	2.6	1.2	2.6	9.6	1.4	1.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	0.74	1.3	1.2	1.1	0.91	0.85	0.93	1.9	6.1	8.2	5.8	6.6	2.3	11	2.7	2.2	3.2	3.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	9.09 H	8.22 H	5.34 H	6.08 H	5.6	7.0	1.2	1.6	1.4	1.4	1.3	1.3	1.2	1.3	2.0	2.6	1.9	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	130	40	37	37	34	33	35	40	38	38	33	40	40	43	51	45	48	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																							
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 200	< 200	< 50	< 50	< 5.0	**7.0 J**	< 100	< 400	< 100	< 100	< 50	< 50	< 50	50 U	71 U	31 U	31 U	25 U	100 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 2.5	< 2.5	**0.55 J**	**6.1**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.0 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 6.0	< 6.0	< 0.60	< 5.0	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.02 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 1.1	**3.2 J**	< 0.11	**0.43 J**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	0.02 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	6.2 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.1 U	**1.2 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 3.3	**5.6 J**	**0.92 J**	**2.1 J**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	7.1 U	1.2 U	1.2 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.39 J**	1.0 U	0.02 U	1.0 U
Trichloroethylene	5	µg/L	**18**	**27**	**41**	**41**	**33**	**28**	**38 J**	**26 J**	**29**	**28**	**33**	**36**	**15**	**19**	**31**	**27**	< 5	**19**	**12**	**12**	**13**	**8.3**	**83**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	**0.3 J**	1.0 U	**0.28 J**	0.02 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	< 2.0	**15 J**	< 0.20	**0.73 J**	< 5.0	< 20	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	14 U	2.5 U	2.5 U	2.0 U	8.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.12 J**	2.0 U	2.0 U	2.0 U	0.04 U	2.0 U
Semivolatile Organic Compounds																																							
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	**0.27**	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.043	< 0.043	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	**0.68 J**	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**5.1**	< 0.50	**0.69**	**0.95**	< 0.19	**0.60**	**2.9**	0.096	**0.13 J**	< 0.19	< 0.19	**0.38**	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.20	< 0.097	0.096	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 UJ	20 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																							
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.24**	**0.23**	**1.3**	0.2 UJ	**0.076 B**	**0.090 B**	**0.074 B**	**64**	**6.2 N**	**2.2**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.01 U	**0.0044 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.0847**	**0.0686**	**0.0626**	**0.0546**	**0.055**	**0.048**	**0.054**	**0.052**	**0.049**	**0.053**	**0.044**	**0.044**	**0.041**	**0.045**	**0.418**	**0.399**	**0.0424**	**0.0377**	0.2 U	**0.0342**	**0.0336**	**0.037**	**0.044**	**0.046**	**0.047**	**0.058**	**0.06**	**0.03**	**0.07**	**0.069**	**0.070**	**0.065**	**0.15**	**0.076**	**0.066**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00020 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.0040 U	0.004 U	**0.0021 B**	0.004 U	0.004 U
Cadmium	0.005	mg/L	**0.0358**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	**0.0013 J**	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.0050 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**20.1**	**20.6**	**19.9**	**19**	**20**	**33**	**34**	**39**	**40**	**60**	**43**	**44**	**44**	**44**	**41**	**44**	**39**	**41**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0012 J**	**0.0016 J**	**0.0012 J**	< 0.010	< 0.010	**0.0015 J**	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.010 U	0.01 U	**0.063**	**0.0061 B**	**0.0023 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0049 B**	**0.0047 B**	**0.0041 B**	**0.013**	**0.0083 B**	**0.0055 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0035 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.020 U	0.020 U	**0.00093 B**	**0.028**	**0.0034 B**	**0.0010 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.010 U	0.010 U	0.01 U	0.01 U	**0.028**	0.01 U	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 UJ	0.0050 U	0.0050 U	0.005 U	**0.0097**	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.3**	**10.2**	**9.93**	**10**	**10**	**18**	**18**	**20**	**20**	**9.4**	**23**	**24**	**25**	**23**	**25**	**22**	**24**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	**0.00017 J**	**0.00010 J**	**0.00013 J**	< 0.00020	< 0.00020	**0.00013 J**	0.00025	< 0.00020	< 0.0002	< 0.00002	0.0002 U	**0.0002**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U	0.0002 U	**0.000072 B**	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.040 U	0.040 U	0.04 U	**0.026 B**	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.13**	**4.59**	**4.52**	**5**	**5.2**	**8**	**8.1**	**7.4**	**7.6**	**10**	**11**	**8.2**	**8.3**	**7.8**	**8.5**	**7.7**	**7.8**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.010 U	**0.0054 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**42.9**	**40.3**	**39.3**	**39**	**40**	**75**	**77**	**74**	**75**	**37**	**82**	**87**	**87**	**79**	**84**	**78**	**76**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.0020 UWN	0.0020 UWN	0.002 UW	0.002 U	0.002 UN	0.002 U	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0076 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0023 J**	**0.0021 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.010 U	0.010 U	**0.0032 B**	**0.0034 B**	0.01 U	**0.099**	**0.013**	**0.0024 B**
Zinc	2	mg/L	**0.0387**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.011 J**	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.05**	**0.03**	**0.0081 B**	0.020 U	0.02 U	**0.052**	**0.0094 B**	**0.013 B**	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - in-situ chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected data reiected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-401S																												
		Sample Date	1/15/2015	7/17/2014	1/13/2014	7/9/2013	1/8/2013	7/24/2012	1/18/2012	7/6/2011	1/19/2011	7/20/2010	1/6/2010	1/13/2009	7/15/2008	1/8/2008	01/08 DUP	7/11/2007	2/13/2007	10/4/2006	7/13/2006	7/06 DUP	1/13/2006	7/19/2005	1/18/2005	7/12/2004	1/23/2004	7/15/2003	1/16/2003	7/16/2002	4/5/2002	1/18/2002	7/17/2001	1/24/2001
		Unit	Post-ISCO																					Pre-ISCO									
Field Parameters																																	
Conductivity	*	mS/cm	0.487	0.504	0.453	0.401	0.250	0.273	0.215	0.256	1.300	0.349	0.285	2.440	0.416	0.358	0.358	0.398	0.468	0.446	0.415	0.415	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.37	1.55	3.54	0.77	0.84	0.84	0.59	0.88	6.33	1.48	5.09	5.83	3.41	1.79	1.79	6.44	5.98	7.91	7.09	7.09	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	51.6	208.2	171.1	227.7	129.0	190.0	168.7	105.8	153.3	13.3	-4.4	314.5	173.1	254.9	254.9	249.5	291	182.8	5.95	5.95	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.38	5.78	5.99	5.90	6.18	6.25	3.88	5.82	0.243	6.49	6.08	0.374	5.92	6.08	6.08	5.98	5.89	6.07	244.3	244.3	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	13.5	20.91	18.75	20.89	18.64	25.59	19.48	25.58	18.99	22.99	18.26	20.24	21.98	20.52	20.52	21.28	20.44	21.51	20.22	20.22	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	7.47	4.29	3.43	2.76	1.3	1.63	2.73	5.49	8.38	2	7.79	1.1	0.82	1.57	1.57	0.59	0.36	0.49	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																	
Carbon Dioxide	*	mg/L	168	185	164	142	61	56	960 B	740 * B	600	1,100 B	860	640	960	< 1000	< 1000	< 1000	--	--	1,000	900	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.1 U	0.1 U	0.1 U	0.081	0.12	8.9	0.04 U	0.041 B	0.053	--	0.078	1.1	0.15
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	< 0.100	< 0.10 HF	< 0.10 HF	0.035 J HF	< 0.025 HF	< 0.064 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.10	< 0.1	--	0.1 U	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0094	0.0119	0.0306	0.0547	0.14	1.9	0.56	2.3	1.0	1.5	--	1.9	2.3	1.8
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 UJ	0.005 UJ	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	< 4	< 0.58	11	3.0	11	29	8.2	44	0.27	0.075 J	0.99	0.66	34	1.4	--	0.59	0.4	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	2.5	3.1	4.2	1.1	0.57	< 0.25	< 0.075	< 0.075	< 0.36	1.4	1.8	1.6	5.5	0.99	0.99	0.52	0.69	--	1.3	1.3	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	14	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.46 H	8.21 H	5.70 H	7.44 H	7.4	6.4	1.3	1.6	1.5	1.3	1.4	1.1	1.5	3.9	3.4	6.4	7.4	--	9.6	8.4	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	62	67	75	64	31	28	26	25	25	50	46	48	53	53	53	57	74	--	71	71	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																	
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 25	< 25	< 5.0	**9.4 J**	< 100	< 100	< 100	< 50	< 50	< 50	< 50	--	50 R	50 R	100 U	83 U	25 U	25 U	25 U	25 U	25 U	**24 J**	--	**12 J**	0.12 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 1.3	< 0.25	13	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	10 U	3.3 U	10 U	10 U	**6.9**	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 3.0	< 3.0	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	--	5 U	5 U	10 U	3.3 U	10 U	10 U	10 U	10 U	10 U	10 U	--	10 U	5.0 U	10 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	0.55	< 0.55	< 0.11	**0.58 J**	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	10 U	3.3 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	--	5 U	5 U	10 U	17 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	**1.3 JB**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.7	< 1.7	**0.90 J**	**3.4 J**	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	10 U	3.3 U	10 U	10 U	**2.9**	10 U	10 U	**0.28 J**	10 U	10 U	5.0 U	10 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	**5.3**	**21**	**59**	**40**	**38**	**28**	**49**	**100**	**170**	**58**	**40**	**100**	**100**	**200**	**130**	--	**56**	**52**	**19**	**31**	**4.1**	**7.8**	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 0.20	**0.95 J**	< 5.0	< 5.0	< 5.0	<5.0	<5.0	<5.0	< 5	5 U	5 U	5 U	20 U	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	--	2.0 U	10 U	2.0 U
Semivolatile Organic Compounds																																	
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 5.0	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.10	<0.10	<0.10	< 0.1	--	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	**0.23**	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.043	< 0.045	< 0.043	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.10	<0.10	<0.10	< 0.1	--	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**0.72 J**	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	**0.16 J**	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	<0.050	<0.050	<0.050	< 0.05	--	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	**1.2**	< 0.50	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	**0.71**	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.5	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	**0.064**	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.097	< 0.099	< 0.096	< 0.19	<0.20	< 0.19	< 0.19	< 10	< 10	< 10	< 10	--	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																	
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	**0.24**	**17**	0.2 U	**0.10 B**	**0.043 B**	--	**0.036 B**	**1.7 N**	**0.21**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.010	< 0.010	< 0.010	< 0.010	<0.0500	<0.0500	<0.050	< 0.05	--	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.112**	**0.121**	**0.100**	**0.0941**	**0.06**	**0.064**	**0.067**	**0.061**	**0.057**	**0.051**	**0.043**	**0.05**	**0.059**	**0.0482**	**0.0479**	**0.0439**	**0.0481**	--	**0.0621**	**0.0574**	0.2 U	**0.0337**	**0.044**	**0.049**	**0.082**	**0.06**	**0.065**	**0.067**	--	**0.068**	**0.067**	**0.061**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	--	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.0050 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**14.7**	**13.9**	**12**	**16**	**29**	**27**	**32**	**31**	--	**32**	**30**	**28**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0014 J**	**0.0016 J**	**0.0013 J**	**0.0022 J**	<0.010	**0.0022 J**	**0.0024 J**	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	**0.016**	0.01 UJ	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0053 B**	**0.0063 B**	--	**0.0078 B**	**0.011**	**0.0066 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0030 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	--	**0.001 B**	0.02 U	**0.096**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	**0.0075**	0.005 UJ	0.0050 U	0.005 U	--	0.005 U	0.005 U	**0.0026 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**12.7**	**10.5**	**7.7**	**10**	**24**	**21**	**24**	**23**	--	**25**	**23**	**23**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00011 B**	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.06**	**3.1**	**4.1**	**3.9**	**6.1**	**4.4**	**4.5**	--	**4.7**	**4.2**	**3.2**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**52.1**	**43.9**	**36**	**56**	**67**	**62**	**76**	**75**	--	**78**	**76**	**76**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1	--	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UW	0.002 UW	--	0.002 UW	0.002 UN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	**0.034**	0.01 UJ	0.010 U	0.01 U	--	0.01 U	**0.0044 B**	0.01 U
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.020	< 0.02	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.028**	**0.03**	0.020 U	0.02 U	--	0.02 U	**0.0092 B**	**0.062**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

B = Analyte was found in the blank and sample
D = Surrogate or matrix spike recoveries were not obtained due to dilution of extract
F = MS or MSD exceeds the control limits
H = Sample was prepped or analyzed beyond specified holding time
* = LCS or LCSD exeeds the control limits

JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Soike samole recoverv outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-401SAP																													
			1/29/2015	1/15 DUP	7/16/2014	1/13/2014	7/10/2013	1/9/2013	7/24/2012	1/18/2012	7/6/2011	1/17/2011	7/20/2010	1/6/2010	7/23/2009	1/13/2009	7/17/2008	1/8/2008	7/11/2007	2/13/2007	7/13/2006	1/13/2006	7/19/2005	1/18/2005	7/12/2004	1/23/2004	7/15/2003	1/17/2003	7/16/2002	1/18/2002	7/17/2001	1/24/2001
			Post-ISCO																				Pre-ISCO									
Field Parameters																																
Conductivity	*	mS/cm	0.286	0.286	0.324	0.314	0.327	0.335	0.359	0.348	0.305	2.55	0.364	0.315	0.336	1.07	0.539	0.485	0.39	0.355	0.351	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	1.97	1.97	2.56	0.41	0.44	0.41	1.37	0.78	3.22	5.98	6.04	12.6	7.58	198	1.39	0.49	2.31	0.47	2.3	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	98.6	98.6	182.5	164.4	186.6	180.0	345	230.8	155.4	206.1	155.5	63.4	167	5.73	170	329.4	238.7	258	96.7	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.94	5.94	5.94	5.95	5.96	6.06	6.06	2.99	5.40	0.256	6.24	8.07	6.01	0.318	6.04	5.92	5.88	5.9	6.00	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.92	17.92	23.21	20.47	22.56	20.86	24.98	19.05	26.87	15.7	31.64	16.15	25.11	20.14	25.12	21.35	23.06	20.39	21.4	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.19	0.84	1.19	1.52	0.58	1.00	1.90	0.78	7.37	9.02	26.0	9.50	2.7	0.85	9.9	2.14	3.24	0.46	1.41	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	65.5	60.4	138	143	124	69	75	1000 B	910 * B	850 *	670 B	550	940	720	970	< 1000	< 1000	--	720	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	0.104	0.1 U	0.05 U	2.6	0.33	0.28	2.5	0.19	0.43	0.66	3.6
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	< 0.100	<0.100	< 0.100	< 0.10 HF	< 0.10 HF	0.025 J HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0177	0.0857	0.131	0.36	0.17	0.15	0.04	0.25	0.06	0.21	0.13	0.47
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005 U	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	< 4	<4	< 4	0.63	< 0.58	< 0.29	< 0.29	< 0.19	< 0.19	0.29	0.20	0.43	0.10 J	0.13	2.0	0.32	1.2	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	2.6	2.4	2.6	2.9	2.4	3.0	2.8	3.8	2.4	12	12	14	11	3.1	25	5.2	3.5	5.3	3	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	8.44 H	8.45 H	8.01 H	5.22 H	5.91 H	6.2	5.7	1.3	1.6	1.5	1.6	1.5	1.1	1.2	1.2	2.4	2.9	2.3	4.2	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	43	41	39	45	41	38	38	44	33	34	33	33	39	42	57	57	45	55	44	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	67 U	62 U	25 U	25 U	25 U	25 U	25 U	**18 J**	**700 D**	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.96 J**	1.0 U	1.0 U	1.0 U	**5.1**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.7 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	12 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.38 J**	1.0 U	1.0 U	**0.7 J**
Trichloroethylene	5	µg/L	**19**	**20**	**23**	**25**	**27**	**18**	**14**	**8.7**	**1.4 J**	**1.6 J**	**1.3 J**	< 5.0	< 5.0	**1.1 J**	**2.6 J**	< 5.0	< 5	< 5	5 U	6.7 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	13 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.16 J**
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 5.0	< 5.0	< 0.50	< 0.50	< 0.50	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	0.14 J	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(e,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.045	< 0.043	< 0.049	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 500	**0.6**	< 0.50	< 0.50	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	**0.033 J**	**0.19**	< 10	< 10	< 10	10 U	0.2 U	**0.54**	**0.37**	0.2 U	**0.54**	10 U	**3.4 J**	10 U	10 U	10 U	**19**
Phenanthrene	10	µg/L	< 0.50	< 0.50	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	**0.38 J**
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	< 0.20	< 0.099	< 0.096	< 0.11	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	**2.3**	**0.3**	**0.5**	**3.3**	**0.27**	0.63 U	**1.2 N**	**6.4**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0032 B**	**0.0032 B**
Barium	2	mg/L	**0.0576**	**0.0566**	**0.0522**	**0.052**	**0.0498**	**0.061**	**0.063**	**0.075**	**0.083**	**0.10**	**0.086**	**0.082**	**0.075**	**0.077**	**0.064**	**0.0790**	**0.0653**	**0.0770**	**0.0705**	0.2 U	**0.0614**	**0.062**	**0.069**	**0.049**	**0.04**	**0.065**	**0.053**	**0.077**	**0.078**	**0.074**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**16**	**18.2**	**17**	**23**	**15**	**15**	**15**	**12**	**14**	**14**	**12**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0015 J**	< 0.010	< 0.010	< 0.010	**0.0015 J**	**0.0021 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0042 B**	0.01 U	0.01 U	0.01 U	**0.0047 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.0035 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0025 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0057 B**	0.02 U	**0.0019 B**	0.02 U	**0.0026 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	0.012	< 0.010	< 0.010	< 0.010	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Maonesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**7.43**	**7.67**	**7**	**7**	**6**	**6.7**	**7.1**	**5.7**	**6.6**	**6.4**	**6.2**
Mercury	0.002	mg/L	0.00036	0.00036	**0.00037**	**0.00036**	**0.00062**	**0.00025**	**0.00021**	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	**0.0005**	**0.00085 F4**	0.0002 U	0.0002 U	0.0002 U	**0.000098 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	**0.0046 J**	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.8**	**3.1**	**3.5**	**2.6**	**3.4**	**2.8**	**2.5**	**2.6**	**2.7**	**2.7**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0054 B**	0.01 U	0.01 U	**0.0045 B**
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**74.9**	**92**	**100**	**88**	**120**	**100**	**120**	**110**	**120**	**140**	**180**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UJ	0.002 UN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0066 B**	0.01 U	0.01 U	0.01 U	**0.0085 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0231**	< 0.020	< 0.020	**0.0094 J**	**0.011 J**	**0.010 J**	**0.012 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.029**	0.02 U	**0.0092 B**	**0.0068 B**	**0.021**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date	MW-402S																												
		Unit	1/12/2015	7/15/2014	1/7/2014	7/9/2013	1/8/2013	1/17/2012	1/17/2012	7/6/2011	1/18/2011	7/15/2010	1/6/2010	1/14/2009	7/21/2008	1/9/2008	7/10/2007	2/15/2007	7/11/2006	1/16/2006	7/20/2005	2/7/2005	7/15/2004	1/22/2004	7/16/2003	1/20/2003	7/11/2002	1/15/2002	7/17/2001	1/23/2001
			Post-ISCO																		Pre-ISCO										
Field Parameters																															
Conductivity	*	mS/cm	0.586	0.579	0.463	0.417	0.557	0.702	0.551	0.487	5.17	1.492	0.372	0.329	0.399	0.457	0.387	0.486	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.46	1.19	2.02	2.61	2.39	3.79	8.00	4.23	6.26	5.75	6.16	2.28	1.64	0.69	0.86	0.45	0.65	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	210.1	120.3	193.8	8.9	80.8	111.0	16.9	110.0	189.4	-71.1	117.9	282.5	165.2	192.9	139.4	153.9	237.6	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	5.90	6.13	6.24	6.11	6.18	6.16	6.88	5.70	0.509	6.41	5.92	6.25	5.75	5.93	5.97	6.35	6.36	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	17.7	22.66	15.57	22.18	18.53	26.40	24.03	22.40	19.18	22.23	17.87	18.35	22.06	20.82	22.29	18.00	20.61	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	1.70	1.64	1.56	2.81	1.07	1.5	4.54	9.9	8.00	7.5	8.7	3.09	6.75	0.63	4.88	6.53	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters														--																	
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.123	0.1 U	0.05 U	0.08	0.05 U	0.06	120	0.23	130 N	190	0.11
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9	0.071	0.57	1.1	1.4	1.2	4.2	1.2	4.4	5.2	1.9
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**9.5 J**	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	**0.28 J**	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	**0.18 JB**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5 J**	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.28 J**	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.48 J**	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	<5.0	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.33 J**	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																															
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**860 D**
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**100**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**13**	
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.048	< 0.057	< 0.049	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**24**	
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**5.9 J**
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	**43**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	**0.33**	< 0.19	< 0.19	< 0.19	<0.050	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.21	< 0.19	**0.56**	< 0.13	**0.27**	< 0.20	< 0.19	< 0.19	0.060 J	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**0.54 J**	**12,000 D**
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**42**	
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.21	< 0.19	< 0.11	< 0.13	< 0.11	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**7.0 J**	
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	200 U	200 U	200 U	200 U	200 U	200 U	**270,000**	**540**	**250,000 N**	**410,000 N**	**230 N**	
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.020	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	**0.22**	< 0.010	< 0.010	<0.0500	<0.050	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.011**	0.01 U	**0.0050 B**	**0.021**	0.01 U
Barium	2	mg/L	**0.0777**	**0.0864**	**0.0802**	**0.0447**	**0.066**	**0.047**	**0.078**	**0.086**	**0.072**	**0.061**	**0.58**	**0.048**	**0.059**	**0.0505**	**0.0511**	**0.0602**	**0.051**	0.2 U	**0.0423**	**0.049**	**0.055**	**0.053**	**0.05**	**0.64**	**0.049**	**0.68**	**0.92**	**0.061**	
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	**0.00029 J**	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.01**	0.004 U	**0.011**	**0.016**	0.004 U	
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0027 B**	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**25**	**28.8**	**28**	**36**	**36**	**31**	**38**	**32**	**37**	**39**	**43**	
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0089 J**	**0.0024 J**	**0.0016 J**	< 0.010	< 0.010	**0.0014 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.19**	0.01 U	**0.2**	**0.31**	0.01 U	
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.09**	**0.0026 B**	**0.096**	**0.14**	**0.0065 B**	
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0036 J**	< 0.0019	< 0.020	< 0.020	< 0.020	**0.0023 J**	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.12**	**0.0012 B**	**0.12**	**0.18**	**0.0023 B**	
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0052 J**	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	**0.0049 J**	< 0.0040	<0.010	<0.010	**0.0025 J**	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.071**	0.005 U	**0.073**	**0.1**	**0.0018 B**	
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**14.6**	**16**	**16**	**20**	**20**	**18**	**29**	**19**	**30**	**37**	**26**	
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00074 S**	0.0002 U	**0.00070**	**0.00093**	0.00020 U	
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0043 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0020 J**	< 0.0200	< 0.020	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.094**	0.04 U	**0.092**	**0.14**	0.04 U	
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.76**	**5.18**	**6.1**	**7.6**	**9**	**6.9**	**16**	**7.3**	**16**	**21**	**7.0**	
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.020	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**42.7**	**46.8**	**42**	**42**	**21**	**39**	**36**	**37**	**36**	**38**	**49**	
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	**0.00030 J**	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	**0.0013 B**	0.002 UN	0.002 U	
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	**0.014**	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.38**	0.01 U	**0.41**	**0.6**	0.01 U	
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.017 J**	< 0.0087	<0.020	< 0.020	**0.017 J**	< 0.020	< 0.0200	< 0.020	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.35**	0.02 U	**0.34**	**0.51**	0.02 U	

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected: data reiected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-402D																												
			1/13/2015	7/15/2014	1/7/2014	7/9/2013	1/9/2013	7/24/2012	1/17/2012	7/6/2011	1/17/2011	7/15/2010	1/5/2010	7/22/2009	1/13/2009	7/22/2008	1/9/2008	7/11/2007	2/15/2007	7/13/2006	1/15/2006	7/20/2005	2/7/2005	7/15/2004	1/22/2004	7/16/2003	1/20/2003	7/12/2002	1/15/2002	7/17/2001	7/01 DUP	1/24/2001
			Post-ISCO																			Pre-ISCO									
Field Parameters																															
Conductivity	*	mS/cm	0.615	0.671	0.516	0.660	0.727	0.657	0.759	0.702	2.6	0.583	0.515	0.531	0.487	0.62	0.690	0.644	0.668	0.608	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.44	1.5	3.57	0.44	0.59	4.06	7.92	2.20	6.48	2.12	4.66	0.23	0.66	0.31	0.31	0.19	0.58	0.37	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	193.1	135.6	82.5	-27.1	67.7	107.0	29.3	101.4	129.3	-74.6	159.9	181.9	165.5	119.5	180.8	120.1	147.8	78.5	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.00	6.17	6.43	6.18	6.23	6.13	6.80	5.79	0.552	6.19	6.47	6.11	6.24	6.34	6.05	6.16	6.49	6.18	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	16.2	21.17	14.74	23.48	17.67	25.80	21.07	21.58	17.61	21.84	15.92	21.31	18.89	22.82	20.77	22.97	19.07	22.21	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	6.44	2.34	2.06	0.89	0.78	2.00	3.34	6.87	9.50	6.80	0.82	4.3	4.13	5.74	0.49	1.42	1.57	2.10	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																															
Carbon Dioxide	*	µg/L	144	140	266	156	72	51	850 B	930 * B	770 *	780	730	910 *	760	860	< 1000	< 1000	--	860	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	4.49	2.29	54	0.31	0.35	0.9	0.49	2.9	3.8 N	0.21	0.19	4.3
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.8	2.67	1.89	4.3	2.9	2.4	2.5	2.5	2.5	2.6	2.4	2.4	2.4
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.64	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	<4	< 0.58	2.4	< 0.29	< 0.29	< 0.19	< 0.19	0.22	0.23	0.5	0.26	0.49	1.8	2.3	2.7	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L		1.5	1.7	2.2	3.6	3.6	4.9	4.6	14	13	9.4	6.0	1.9	8.9	2.3	2.0	2.2	2.5	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	1.6	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	7.79 H	7.78 H	7.28 H	8.18 H	6.4	7.5	--	1.5	1.6	1.4	1.4	1.1	1.3	1.1	1.9	1.6	2.3	1.9	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	56	54	78	63	35	33	39	39	36	39	26	33	32	29	44	40	45	44	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	uo/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.19 J**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.4 J**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.29 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.16 J**	**0.23 J**	**0.15 J**	**0.19 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	**2.2**	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																															
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.37 J**	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.046	< 0.045	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	ua/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	ua/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 500	< 0.50	< 0.50	< 0.50	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	**0.30**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	**0.24**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 0.19	< 0.10	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.91**	**5.48**	**130**	**0.68**	**0.35**	**1.3**	**0.83**	**6.7**	**8.8 N**	**0.52 N**	**0.44 N**	**12**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0768**	**0.0771**	**0.0874**	**0.0950**	**0.10**	**0.083**	**0.12**	**0.10**	**0.10**	**0.24**	**0.082**	**0.078**	**0.08**	**0.083**	**0.0699**	**0.0662**	**0.0529**	**0.0615**	0.2 U	**0.0472**	**0.22**	**0.053**	**0.045**	**0.04**	**0.045**	**0.052**	**0.058**	**0.039**	**0.037**	**0.055**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	**0.0065**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	**0.00067 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**26.5**	**28**	**40**	**55**	**47**	**43**	**54**	**50**	**50**	**49**	**49**	**47**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0012 J**	< 0.0012	**0.0018 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0079**	0.01 U	**0.097**	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0049 B**	**0.0061 B**	0.01 U	0.01 U	**0.0086 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.01 U	**0.046**	0.01 U	0.01 U	0.01 U	**0.0017 B**	**0.0075 B**	**0.0057 B**	**0.0019 B**	**0.0015 B**	**0.0058 B**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	**0.076**	0.02 U	0.02 U	0.02 U	**0.0037 B**	**0.0051 B**	**0.0054 B**	0.02 U	0.02 U	**0.011 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0033**	0.005 U	**0.029**	0.005 U	0.005 U	0.005 U	**0.0024 B**	0.005 U	0.0050 U	0.005 U	0.005 U	**0.0019 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**11.9**	**11.2**	**18**	**21**	**18**	**18**	**22**	**21**	**21**	**21**	**21**	**21**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	**0.00042**	< 0.00020	< 0.00020	< 0.00020	< 0.00091	< 0.00091	< 0.00091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	**0.00022**	0.0002 U	0.0002 U	0.0002 U	**0.00015 B**	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	**< 0.040**	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	**0.06**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0063 B**	0.04 U	0.04 U	**0.007 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**13.7**	**14.6**	**22**	**19**	**19**	**22**	**19**	**18**	**18**	**17**	**17**	**18**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0043 B**	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**72.8**	**69.7**	**76**	**73**	**40**	**77**	**79**	**72**	**77**	**78**	**77**	**88**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	**0.0023**	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.0020 U	0.002 UWN	0.002 UWN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	**0.0166**	0.01 U	**0.22**	0.01 U	0.01 U	0.01 U	**0.0026 B**	**0.011**	**0.015**	0.01 U	0.01 U	**0.019**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	**0.015 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	**0.0203**	0.02 U	**0.14**	0.02 U	0.02 U	**0.03**	**0.008 B**	**0.016 B**	**0.0098 B**	0.02 U	0.02 U	**0.026**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-404DR																												
			1/14/2015	7/17/2014	1/13/2014	7/10/2013	1/9/2013	7/26/2012	1/19/2012	7/7/2011	1/19/2011	7/19/2010	1/5/2010	7/23/2009	1/14/2009	7/15/2008	1/8/2008	7/10/2007	2/14/2007	7/12/2006	7/21/2005	1/20/2005	7/16/2004	1/24/2004	7/19/2003	1/17/2003	7/15/2002	4/4/2002	4/3/2002	1/16/2002	7/16/2001	1/23/2001	01/01 DUP
			Post-ISCO																		Pre-ISCO										
Field Parameters																																
Conductivity	*	mS/cm	0.450	0.288	0.740	0.800	0.732	0.841	0.680	0.786	2.95	0.779	0.696	0.739	1.91	0.67	0.664	0.571	0.397	0.205	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	3.19	0.71	0.52	0.31	0.83	0.48	1.13	3.38	6.29	1.3	5.56	0.25	6.24	0.87	1.41	0.36	5.43	4.89	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-41.7	-14.6	291.8	112.9	23.5	89.0	232.6	112.2	510.2	3.2	304	437.2	478.3	124.1	528.9	273.4	14.7	-82	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.06	6.18	6.32	6.03	6.36	6.11	6.19	6.38	0.814	6.32	5.94	5.81	0.664	5.94	5.91	5.88	6.32	6.98	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	15.3	22.25	19.60	22.27	20.71	30.00	17.35	23.78	19.81	25.7	11.17	22.72	18.02	22.65	19.39	23.39	18.13	22.89	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	2.84	0.71	0.73	3.66	1.11	0.5	1.43	1.09	0.59	4.2	1.01	4.8	3.45	1.36	4.10	3.98	9.97	48.4	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																																
Carbon Dioxide	*	µg/L	253	410	443	467	170	220	3,200 B	2,600 B	2,400	780 JB	1,400	2,500	1,200	4,200	< 1,000	< 1,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.72	2.5	1.2	0.05 U	0.11	0.17	6.7 N	--	--	0.14	0.27	1.2	0.61
Iron, as Ferrous (Fe+2)	*	mg/L	< 1.00	< 0.100	<0.100	<0.100	< 0.10 HF	< 0.10 HF	< 0.025 HF	< 0.025 HF	< 0.076 JHF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10 HF	< 0.10	< 0.10	< 0.10	< 0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.416	0.3	0.15	0.11	0.16	0.16	0.24	--	--	0.21	0.18	0.22	0.21
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	< 4	< 4	<4	11	0.95	5.5	0.52 J	8.1	2.1	< 0.19	1.3	3.2	1.4	0.59	2.3	2.6	6.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	13	< 1.1	< 1.1	0.22	< 0.50	< 0.25	< 0.25	< 0.25	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	8.96 H	7.79 H	7.10 H	6.22 H	5.2	5.8	--	1.3	1.4	1.4	1.4	1.0	1.1	0.77	3.2	3.3	5.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	78	140	140	140	120	120	120	140	130	39	120	120	120	100	120	72	68	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	50 U	**47**	25 U	25 U	25 U	25 U	25 U	25 U	--	--	25 U	25 U	25 U	25 U
Benzene	5	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.8**	1.0 U	**0.18 J**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.17 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.37 J**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.44 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.89 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	--	--	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																																
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	--	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	**16**	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.082**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	**0.074**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	0.2 U	**0.6**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	**0.065**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	**0.68**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	--	0.2 U	0.2 U	**0.66**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.58**	0.2 U	10 U	10 U	10 U	**0.7 J**	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	**0.065**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.5**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	**0.067**	< 0.050	< 0.050	<0.21	< 0.19	< 0.049	< 0.045	< 0.048	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	**0.62**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	--	--	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.94**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	**1.6 J**	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	**0.064**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	--	0.2 U	0.2 U	**0.56**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**3.3**	< 0.50	**0.55**	**1.1**	<0.21	< 0.19	< 0.11	< 0.10	**0.17 J**	**0.75**	< 0.19	< 0.19	< 0.19	**0.33**	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.26**	0.2 U	10 U	10 U	10 U	10 U	**24**	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.50	**0.083**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**0.36**	0.2 U	10 U	10 U	10 U	10 U	**0.99 J**	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.050	**0.084**	< 0.050	< 0.050	<0.21	< 0.19	< 0.11	< 0.10	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	--	0.2 U	0.2 U	**1.2**	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.44**	**4.1**	**1.8**	0.2 U	**0.3**	**0.15 B**	**15**	--	--	**0.15 B**	**0.32**	**2.3 N**	**1.0 N**
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	--	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0678**	**0.141**	**0.140**	**0.174**	**0.15**	**0.19**	**0.16**	**0.20**	**0.19**	**0.24**	**0.23**	**0.26**	**0.28**	**0.31**	**0.331**	**0.306**	**0.178**	--	**0.31**	**0.15**	**0.078**	**0.058**	**0.06**	**0.059**	**0.23**	--	--	**0.048**	**0.042**	**0.088**	**0.069**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	**0.00030 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00061 B**	--	--	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	**0.00082 B**	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.66**	**9.1**	**8.2**	**8.6**	**7.8**	**8.1**	**8.9**	--	--	**8.3**	**7.9**	**9.6**	**9.2**
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	--	--	0.01 U	0.01 U	**0.0021 B**	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0027 B**	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0030 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0045 B**	**0.017 B**	--	--	0.02 U	**0.0011 B**	**0.0041 B**	**0.0035 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	**0.012**	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	**0.011**	< 0.010	< 0.010	**0.0099 J**	< 0.010	< 0.010	< 0.010	--	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	--	0.005 U	**0.021**	**0.018**	0.005 U	0.005 U	0.005 U	**0.009**	--	--	0.005 U	0.005 U	**0.0016 B**	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.47**	**6.8**	**5.9**	**6**	**6.5**	**6**	**7**	--	--	**6.1**	**5.6**	**6.9**	**6.6**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	--	--	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0040 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	**0.0017 J**	< 0.0200	< 0.02	< 0.02	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0083 B**	--	--	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.51**	**2.6**	**2.3**	**2.1**	**2**	**2.2**	**2.8**	--	--	**2.1**	**2.0**	**2.2**	**2.1**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0056 B**	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**21.8**	**20**	**17**	**17**	**18**	**18**	**17**	--	--	**18**	**17**	**20**	**19**
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	--	0.001 U	0.002 U	0.002 U	0.001 U	0.002 U	0.002 U	0.002 UWN	--	--	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0029 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0039 J**	**0.0039 J**	< 0.0100	< 0.010	< 0.010	--	0.01 U	**0.021**	0.01 U	0.01 U	0.01 U	0.01 U	**0.0026 B**	**0.053**	--	--	**0.0025 B**	0.01 U	**0.0045 B**	**0.0029 B**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	**0.0233**	0.020	0.020	< 0.0087	**0.011 J**	< 0.0087	**0.015 J**	<0.020	**0.057**	**0.036**	**0.014 J**	**0.0228**	< 0.02	< 0.02	--	**0.0232**	**0.056**	**0.05**	**0.039**	**0.06**	**0.033**	**0.035**	--	--	**0.041**	**0.012 B**	**0.013 B**	**0.011 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-408S																												
			1/15/2015	7/16/2014	1/9/2014	7/10/2013	1/8/2013	7/25/2012	1/18/2012	7/5/2011	1/20/2011	7/14/2010	1/12/2010	01/09 DUP	1/21/2009	7/16/2008	1/8/2008	7/10/2007	7/13/2006	7/06 DUP	1/15/2006	01/06 DUP	7/20/2005	2/7/2005	7/13/2004	1/24/2004	7/19/2003	1/16/2003	7/11/2002
			Post-ISCO																				Pre-ISCO							
Field Parameters																															
Conductivity	*	mS/cm	1.6	1.541	1.241	1.299	1.059	0.797	0.662	1.509	1.51	1.492	1.676	1.214	0.3	1.235	1.210	0.991	1.112	1.112	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	0.71	0.12	0.23	1.14	0.51	0.51	0.43	0.19	6.67	5.75	0.73	0.3	6.51	0.49	0.30	1.18	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-153.6	-119.4	-121.7	9.5	-97.5	-76.9	-40.0	-106.9	-105.1	-106.4	-83.7	-106	-106	-125.7	-103.4	-95.3	-104.4	-104.4	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	7.36	6.46	6.92	6.83	6.62	6.64	6.19	6.32	1.321	6.41	7.48	6.51	1.214	6.44	6.49	6.60	6.58	6.58	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	11.8	22.64	18.55	24.01	17.52	26.40	19.97	23.54	18.65	23.94	20.21	18.13	18.13	23.87	20.65	22.57	23.37	23.37	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	22.1	9.92	3.72	1.11	1.72	2.84	8.8	9.62	14.0	102.8	1.28	3	3	6.24	1.80	7.28	4.33	4.33	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																															
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19.8	19.6	18.3	98	22	32	19	35	28
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.711	0.606	0.638	1.6	0.62	0.66	0.52	0.70	0.72
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																															
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	**5.9 J**	< 5.0	**14 J**	< 100	< 100	< 100	< 100	< 50	< 50	50 R	50 R	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.13 J**	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.45 J**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.4 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.90 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3.6 J**	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semivolatile Organic Compounds																															
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	**65**	< 0.10	< 0.096	< 0.19	< 0.19	**0.089 J**	**0.086 J**	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	**0.031 J**	**0.031 J**	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.050	**0.051**	< 0.050	< 0.050	< 0.19	< 0.19	**0.90**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	**0.050**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	**0.055**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.10	<0.10	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	**0.057**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.048	< 0.046	< 0.043	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.10	<0.10	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	**0.26**	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	**0.30**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	**0.40**	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	**3.3**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	**0.059**	< 0.19	< 0.19	< 0.11	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	<0.050	<0.050	0.05 U	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.50	**44**	< 0.50	< 0.50	< 0.19	**3.6**	**0.59**	< 0.10	**0.12 J**	< 0.19	**0.35**	**1.4**	**1.3**	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	<0.050	**0.088**	< 0.050	< 0.050	< 0.19	< 0.19	**5.8**	< 0.10	< 0.096 *	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	**0.096**	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	**0.23**	< 0.10	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																															
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.29**	**2.2**	**1.1**	**120**	**3.8**	**12**	**0.7**	**12**	**0.032 B**		
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	0.02 U	0.02 U	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U		
Arsenic	0.05	mg/L	**0.222**	**0.143**	**0.210**	< 0.0500	**0.39**	**0.21**	< 0.0046	**0.031**	**0.018 J**	**0.017 JB**	**0.22**	**0.043**	**0.043**	**0.041**	**0.0509**	**0.0439**	**0.126**	**0.123**	**0.0697**	**0.0723**	**0.142**	**0.069**	**0.056**	**0.058**	**0.02**	**0.079**	**0.044**		
Barium	2	mg/L	**0.444**	**0.451**	**0.289**	**0.201**	**0.38**	**0.45**	**0.54**	**0.62**	**0.60**	**0.55**	**0.58**	**0.45**	**0.44**	**0.35**	**0.341**	**0.302**	**0.447**	**0.438**	**0.467**	**0.453**	**0.397**	**1.7**	**0.56**	**0.58**	**0.44**	**0.72**	**0.58**		
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00030 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	0.01 U	0.01 U	0.005 U	0.005 U	0.004 U	**0.0054**	0.004 U	0.004 U	0.004 U	**0.00073 B**	0.004 U		
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U		
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**71.7**	**75.6**	**89.2**	**89**	**79**	**80**	**78**	**88**	**79**		
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0015 J**	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	0.01 U	0.01 U	0.005 U	0.005 U	0.01 U	**0.14**	0.01 U	**0.013**	0.01 U	**0.013**	0.01 U		
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.007 U	0.01 U	**0.035**	0.01 U	0.01 U	0.01 U	**0.0032 B**	0.01 U		
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0028 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	**0.11**	0.02 U	0.02 U	0.02 U	**0.014 B**	**0.0011 B**		
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.013**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.010	< 0.010	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U		
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	0.01 U	0.01 U	**0.0041**	**0.0057**	0.005 U	**0.23**	**0.0063**	**0.034**	0.005 U	**0.032**	0.005 U		
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**71.9**	**78**	**77.5**	**89**	**82**	**83**	**79**	**97**	**91**		
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.0013**	0.0002 U	0.0002 U	0.0002 U	**0.00016 B**	0.0002 U		
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0025 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.020	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	**0.051**	0.04 U	0.04 U	0.04 U	**0.0058 B**	0.04 U		
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**22.8**	**23.3**	**20.5**	**27**	**25**	**26**	**29**	**28**	**27**		
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.020	0.02 U	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.010 U	0.01 U		
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**69.5**	**70.5**	**59.1**	**60**	**86**	**86**	**70**	**100**	**100**		
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.004 UN		
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	**0.0075**	**0.0088**	0.01 U	**0.22**	**0.012**	**0.025**	0.01 U	**0.026**	**0.0034 B**	--	--		
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.069**	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	0.02 U	0.02 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--		

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-408D																						
		Sample Date	7/14/2010	1/5/2010	7/22/2009	1/15/2009	7/16/2008	1/8/2008	7/10/2007	2/13/2007	2/07 DUP	7/13/2006	7/06 DUP	1/15/2006	7/20/2005	2/7/2005	7/13/2004	1/24/2004	7/19/2003	1/16/2003	7/12/2002	1/15/2002	1/15/2002	7/17/2001	1/17/2001	1/01 DUP
		Unit	Post-ISCO												Pre-ISCO										
Field Parameters																										
Conductivity	*	mS/cm	0.784	0.640	0.841	0.230	0.838	0.928	0.785	0.822	0.822	0.718	0.718	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (YSI)	*	mg/L	2.61	2.07	2.11	6.26	0.37	0.31	0.68	0.52	0.52	0.7	0.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential	*	mV	-65.2	-19.3	-60.6	-74.2	-67	-89.8	-70.3	-71.4	-71.4	-65.8	-65.8	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	*	SU	6.48	5.94	6.49	0.772	6.33	6.47	6.42	6.59	6.59	6.41	6.41	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature	*	Celsius	24.1	16.76	25.75	18.39	23.05	19.70	21.75	19.19	19.19	22.77	22.77	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	*	NTU	21.7	8.91	4.81	8.3	9.68	1.35	6.25	1.63	1.63	3.13	3.13	--	--	--	--	--	--	--	--	--	--	--	--	--
Monitored Natural Attenuation Parameters																										
Carbon Dioxide	*	µg/L	660 JB	540	590 *	510	580	< 1,000	< 1,000	--	--	410	420	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	37.9	36.1	38.2	36.2	36	35	33	35	37	54	57 N	58 N	45	41	40
Iron, as Ferrous (Fe+2)	*	mg/L	15 HF	26 HF	25 HF	13 HF	26	39.6	38.7	36.5	37.4	36.8	37	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese, Total	*	mg/L	--	--	--	--	--	--	--	--	--	4.42	4.36	4.4	4.15	4.5	4.7	4.7	4.2	4.8	4.6	4.8	4.8	4.4	4.8	4.8
Manganese, Dissolved	*	mg/L	--	--	--	--	--	--	--	--	--	3.65 J	3.58 J	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	1,600	1,900	2,200	2,200	600	2,100	2,000	2,000	1,800	1,700	1,700	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	< 1.1	< 1.1	< 1.1	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25	0.25 U	0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	*	mg/L	--	--	--	--	--	--	--	--	--	18	18	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, ammonia (as N)	*	mg/L	--	--	--	--	--	--	--	--	--	0.74	0.74	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	1.3	1.3	1.1	1.3	1.6	2.1	1.9	1.5	2.6	1.2	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1	< 1	1 U	1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	*	mg/L	--	--	--	--	--	--	--	--	--	2 U	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																										
Acetone	4,000	µg/L	**8.1 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50 R	< 50	50 R	50 R	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	**0.47 J**	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	**1.8**	**4.2**	**13**	**2.3**	**1.9**	**3.0**	**2.4**	**2.8**	**4.6**	**4.0**	**6.2**	**2.3**	**2.4**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5 J	< 5	5 U	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.48 JB**	**0.54 JB**
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	**8.6**	1.0 U	1.0 U	1.0 U	**0.2 J**	**2.7**	**9.3**	**8.3**	**12**	**1.1**	**1.7**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.9**	**0.32 J**	**0.35 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	**8.8**	**11**	**8.2**	**12**	**8.4**	**9.3**	< 5	**8.1**	**8.3**	5 U	5 U	**4.7**	**7.7**	**14**	**7.0**	**6.8**	**13**	**8.9**	**18**	**34**	**32**	**36**	**6.3**	**6.9**
Semivolatile Organic Compounds																										
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	**26**	**27**	**36**	**26**	**26**	**30**	**37**	**12**	**60**	**59**	**38**	**25**	**24**
Acenaphthene	2,000	µg/L	**58**	**80**	**79**	**48**	**43**	**54**	**52**	**52**	**54**	**40**	**43**	**41**	**25**	**25**	**46**	**31**	**30**	**34**	**37**	**44**	**45**	**33**	**41**	**38**
Acenaphthylene	10	µg/L	**0.66**	< 1.9	< 0.21	< 3.8	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	**0.61 J**	10 U	**10**	10 U	10 U
Anthracene	10	µg/L	**1.6**	**2.4**	**2.8**	**1.5 J**	**2**	< 10	< 10	< 10	< 10	10 U	10 U	**1.7**	**1.1**	**0.84**	**1.3**	**1.2**	10 U	**1.2 J**	**0.97 J**	**0.96 J**	**1.4 J**	**0.79 J**	**1.2 J**	**1.4 J**
Benz(a)anthracene	0.1	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.053 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.037 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.1**	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	0.1 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	< 0.19	< 10	< 10	< 10	< 10	10 U	10 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.064 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	0.1 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	**1.5**	**1.1**	0.8 U	1.0 U	**1.4**	10 U	**1.6 J**	**1.9 J**	**2.1 J**	**2.3 J**	**1.6 J**	**2.0 J**	**2.0 J**
Fluoranthene	1,000	µg/L	**0.57**	< 1.9	**0.82**	**0.44 J**	**0.72**	< 10	< 10	< 10	< 10	10 U	10 U	**0.57**	**0.37**	0.8 U	1.0 U	**0.4**	10 U	**0.41 J**	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	**11**	**16**	**16**	**10**	**11**	**11**	**11**	**11**	**11**	10 U	10 U	**9.0**	**6.0**	**5.4**	**8.9**	**7.7**	10 U	**7.0 J**	**7.7 J**	**8.8 J**	**9.6 J**	**6.1 J**	**8.3 J**	**7.6 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.20	< 1.9	< 0.21	< 3.8	**0.023 J**	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	2.0 U	2.0 U	0.8 U	1.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**0.34**	< 1.9	< 0.21	**1.1 JB**	**0.31**	< 10	< 10	< 10	< 10	10 U	10 U	**1.0**	**7.3**	**52**	**1.7**	**4.2**	**15**	**15**	10 U	**41**	**39**	**33**	**5.8 J**	**5.4 J**
Phenanthrene	10	µg/L	**12**	**15**	**17**	**9.6**	**11**	**11**	**12**	**11**	**12**	10 U	10 U	**9.5**	**6.2**	**5**	**9.3**	**6.6**	10 U	**6.9 J**	**4.3 J**	**5.8 J**	**7.4 J**	**5.2 J**	**8.1 J**	**8.3 J**
Pyrene	1,000	µg/L	**0.5**	< 1.9	**0.84**	**0.52 J**	**0.64**	< 10	< 10	< 10	< 10	10 U	10 U	**0.56**	**0.36**	0.8 U	1.0 U	**0.37**	10 U	10 U	**0.57 J**	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																										
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	**0.32**	0.2 U	**0.056 B**	**10**	**11 N**	**11 N**	**4.9 N**	**1.6**	**1.1**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.020 U	0.02 U	**0.0062 B**	**0.0066 B**
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.010 U	**0.0037 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.64**	**0.62**	**0.64**	**0.66**	**0.63**	**0.627**	**0.628**	**0.667**	**0.671**	**0.696**	**0.687**	**0.684**	**0.628**	**0.7**	**0.74**	**0.72**	**0.6**	**0.72**	**0.72**	**0.76**	**0.77**	**0.68**	**0.69**	**0.7**
Beryllium	0.004	mg/L	**0.00023 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.0040 U	0.004 U	**0.0023 B**	**0.0017 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.0050 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**55.2**	**54.1**	**53**	**56**	**61**	**50**	**56**	**53**	**52**	**53**	**50**	**53**	**52**
Chromium	0.1	mg/L	**0.0021 J**	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0035 B**	**0.0041 B**	**0.0038 B**	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	-	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0056 B**	**0.013**	**0.013**	**0.013**	**0.0089 B**	**0.0053 B**	**0.005 B**
Copper	1.3	mg/L	**0.0033 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	**0.018 B**	**0.020 B**	**0.020**	**0.0076 B**	0.02 U	**0.0014 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.017**	< 0.002	< 0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.0026 B**	**0.0046 B**	**0.0046 B**	0.005 U	**0.0031 B**	**0.0028 B**
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**31.5**	**29.2**	**29**	**30**	**32**	**27**	**31**	**33**	**33**	**34**	**30**	**28**	**28**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	**0.0018 J**	**0.0017 J**	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	**0.0069 B**	**0.0069 B**	**0.0076 B**	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	5 U	**3.64**	**4.8**	**4**	**6.5**	**3.8**	**5.0**	**4.1**	**4.0**	**3.9**	**3.7**	**4.2**	**4.2**
Selenium	0.05	mg/L	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.010 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**23**	**23.5**	**22**	**23**	**24**	**22**	**22**	**21**	**22**	**22**	**21**	**21**	**21**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.0020 U	0.0020 U	0.002 UN	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	**0.0097 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.045**	**0.050**	**0.052**	**0.022**	**0.0072 B**	**0.0059 B**
Zinc	2	mg/L	**0.013 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	**0.0224**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.052**	**0.075**	**0.066**	**0.031**	**0.011 B**	**0.0082 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-408DR								
		Sample Date	1/15/2015	7/16/2014	1/8/2014	7/10/2013	1/8/2013	7/25/2012	1/25/2012	7/5/2011	2/23/2011
		Unit	Post-ISCO								
Field Parameters											
Conductivity	*	mS/cm	1.310	0.645	0.630	0.755	0.597	0.390	0.170	0.619	3.360
Dissolved Oxygen (YSI)	*	mg/L	0.84	0.10	0.22	0.05	0.53	4.20	0.31	0.08	5.68
Oxidation Reduction Potential	*	mV	-103.5	-83.8	-55.5	-53.7	-61.8	-13.5	-136.0	-50.9	89.2
pH	*	SU	6.29	6.12	6.21	5.98	6.08	6.03	6.71	6.03	0.682
Temperature	*	Celsius	13.70	21.10	18.61	21.17	18.05	24.35	19.98	21.79	20.79
Turbidity	*	NTU	20.1	20.0	35.2	23.4	9.00	21.2	8.53	23.2	9.92
Monitored Natural Attenuation Parameters											
Carbon Dioxide	*	µg/L	137	192	272	235	130	140	2,200 B	1,500 B	1,600
Iron, as Ferrous (Fe+2)	*	mg/L	3.85	39.7	45.1	51.8	46 HF	25 HF	0.79 HF	19 HF	13 HF
Methane	*	µg/L	6,600	6800	6,700	6,800	7,500	3,000 *	860	2,400	3,700
Nitrate	*	mg/L	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.36
Oxygen	*	mg/L	7.78 H	4.68 H	4.12 H	4.34 H	4.5	5	--	1.4	1.5
Sulfate	*	mg/L	< 1.0	< 1.0	<1.0	<1.0	< 5.0	< 5.0	250	< 2.6	< 2.6
Volatile Organic Compounds											
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	**19 J**
Benzene	5	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	**0.80 J**	< 0.25
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.3 J B**	< 1.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.38 J**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13
Xylenes, total	2,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	**2.2 J**	**2.8 J**
Semivolatile Organic Compounds											
Acenaphthene	2,000	µg/L	< 0.50	**41**	**32**	**17**	**32**	**30**	< 0.11	**32**	**16**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**0.40**	< 1.9	< 0.11	< 0.15	**0.22**
Anthracene	10	µg/L	< 0.050	**0.9**	**0.83**	**0.39**	**0.87**	< 1.9	< 0.11	**1.0**	**0.21**
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.050	< 0.066	< 0.042
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Fluoranthene	1,000	µg/L	< 0.10	**0.23**	**0.23**	**0.10**	**0.23**	< 1.9	< 0.11	**0.29**	< 0.094
Fluorene	1,000	µg/L	< 0.10	**1.9**	**2**	**1.3**	**2.7**	**2.2**	< 0.11	**4.0**	**2.0**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.22	< 1.9	< 0.11	< 0.15	< 0.094
Naphthalene	20	µg/L	< 500	**31**	**0.57**	< 0.50	**0.27**	< 1.9	**0.57**	**0.24 J**	**0.23**
Phenanthrene	10	µg/L	< 0.50	**3.7**	**5.3**	**2.5**	**5.8**	**5.1**	< 0.11	**7.3**	**1.5**
Pyrene	1,000	µg/L	< 0.050	**0.15**	**0.16**	**0.065**	<0.22	< 1.9	< 0.11	**0.21 J**	< 0.094
Inorganic Compounds											
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053
Arsenic	0.05	mg/L	**0.429**	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.045**	< 0.0046	< 0.0046
Barium	2	mg/L	**0.448**	**0.496**	**0.575**	**0.569**	**0.56**	**0.58**	**0.26**	**0.52**	**0.50**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0018 J**	**0.0013 J**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0063 J**	**0.024**	< 0.0050
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	**0.000092 J**
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0024 J**	**0.0030 J**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024
Zinc	2	mg/L	< 0.0200	**0.132**	< 0.0200	< 0.0200	**0.038**	< 0.020	< 0.0087	< 0.0087	**0.018 J**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
RRS - Risk Reduction Standard

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-501S														
		Sample Date	1/15/2015	7/17/2014	1/13/2014	7/10/2013	1/9/2013	7/26/2012	1/19/2012	7/7/2011	1/19/2011	7/19/2010	1/5/2010	1/14/2009	7/15/2008	1/8/2008	2/14/2007
		Unit	Post-ISCO														
Field Parameters																	
Conductivity	*	mS/cm	0.642	0.510	0.546	0.840	0.693	0.782	0.748	0.730	6.080	0.903	0.832	0.869	0.971	1.101	1.058
Dissolved Oxygen (YSI)	*	mg/L	0.90	0.21	1.27	0.23	0.30	0.52	0.35	0.27	6.76	0.76	4.45	0.91	1.25	0.33	2.58
Oxidation Reduction Poten	*	mV	65.4	-165.2	142.8	-53.3	19.6	52.0	-56.3	-55.8	309.7	-58.2	-20.5	24.4	24	67.4	14.6
pH	*	SU	6.35	6.45	6.65	6.29	6.57	6.29	6.46	6.50	0.142	6.53	6.15	6.55	6.41	6.31	6.49
Temperature	*	Celsius	12.4	23.98	17.47	23.38	19.34	28.30	18.89	24.02	16.39	26.56	12.01	16.37	23.88	19.16	16.44
Turbidity	*	NTU	8.60	7.06	6.46	1.52	0.61	1.0	68.0	1.25	8.93	5.0	3.77	4.78	1.8	2.95	4.52
Monitored Natural Attenuation Parameters																	
Carbon Dioxide	*	µg/L	323	406	393	425	110	96	2,200	1,400 B	120	940 B	1,100	1,700	4,200	< 1000	< 1000
Iron, as Ferrous (Fe+2)	*	mg/L	< 0.100	0.48	3.20	3.2	0.80 HF	< 0.10 HF	2.6	3.2 HF	0.074 JHF	<0.10 HF	1.2 HF	0.38 HF	0.56	0.25	< 1.0
Methane	*	µg/L	< 4	170	28	97	9.8	1.7	21	7.0	< 0.19	3.6	31	16	2.2	9.9	19
Nitrate	*	mg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.075	< 0.36	<1.1	<1.1	0.030 J	<0.50	< 0.25	0.63
Oxygen	*	mg/L	8.62 H	7.4 H	7.39 H	6.71 H	6.1	7.9	1.2	2.1	1.6	1.1	1.4	1.1	0.80	2.1	5.7
Sulfate	*	mg/L	61	62	89	81	75	82	80	81	11	140	160	150	150	160	150
Volatile Organic Compounds																	
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	**7.6 J**	< 50	< 50
Benzene	5	µg/L	**35**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.37 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	**1.9 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	µg/L	5.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.20 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	**7.4**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**0.91 J**	< 5.0	< 5.0	< 5.0	**0.4 J**	< 5.0	< 5.0
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes, total	2,000	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Semivolatile Organic Compounds																	
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	**0.031 J**	<0.050	<0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	**0.20**	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.042	< 0.044	< 0.043	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.10	<0.10
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	**0.050 J**	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	<0.050	<0.050
Naphthalene	20	µg/L	**5.0**	< 0.50	< 0.50	< 0.50	<0.20	< 0.19	**0.21**	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	**0.21**	< 10	< 10
Phenanthrene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 0.19	< 0.094	< 0.097	< 0.095	< 0.20	<0.19	**0.023 J**	**0.063 J**	< 10	< 10
Inorganic Compounds																	
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	**0.0053 J**	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0073 J**	< 0.0046	< 0.0046	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500
Barium	2	mg/L	**0.103**	**0.165**	**0.117**	**0.184**	**0.17**	**0.15**	**0.25**	**0.17**	**0.015**	**0.14**	**0.19**	**0.12**	**0.13**	**0.0754**	**0.290**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00028 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100
Cadmium	0.005	mg/L	**0.0153**	< 0.0050	**0.0375**	< 0.0050	<0.0050	**0.0083**	**0.0085**	< 0.0020	**0.012**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0023 J**	**0.0015 J**	**0.0026 J**	**0.0016 J**	<0.010	**0.0016 J**	**0.0020 J**	< 0.0100	**0.0296**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.014 JB**	**0.0022 J**	< 0.020	< 0.020	< 0.020	< 0.0100	**0.0403**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	**0.018**	< 0.010	**0.0070 J**	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	**0.0342**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	**0.0045 J**	< 0.0200	< 0.0200
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0045 J**	< 0.0024	**0.0029 J**	< 0.010	< 0.010	< 0.010	**0.0020 J**	< 0.0100	**0.0387**
Zinc	2	mg/L	< 0.0200	< 0.0200	**0.043**	**0.0265**	< 0.020	< 0.020	**0.033**	< 0.0087	**0.026**	**0.010 J**	<0.020	**0.032**	< 0.020	< 0.0200	**0.0939**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
< - Analyte not detected at referenced detection limit

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	1/14/2014	1/14 DUP	1/10/2013	1/13 DUP	7/25/2012	7/2012 DUP	1/19/2011	01/11 DUP	7/7/2011	1/19/2011	7/19/2010	1/12/2010	1/10 DUP	7/23/2009	1/21/2009	7/21/2008	1/8/2008	7/10/2007	07/07 DUP	2/14/2007
Field Parameters																						
Conductivity	*	mS/cm	0.626	0.626	1.157	1.157	0.707	0.707	0.690	0.690	0.693	0.890	0.800	0.709	0.709	0.69	0.350	0.677	0.819	0.642	0.642	0.794
Dissolved Oxygen (YSI)	*	mg/L	0.27	0.27	0.33	0.33	0.66	0.66	1.00	1.00	0.30	6.11	0.46	0.15	0.15	0.08	5.95	0.28	0.23	0.41	0.41	1.66
Oxidation Reduction Potent	*	mV	-48.5	-48.5	-106.8	-106.8	-46.0	-46.0	-43.7	-43.7	-27.0	-60.6	-87.4	-18.2	-18.2	-40.9	-40	-48.7	-48.1	-12.0	-12.0	-30
pH	*	SU	6.02	6.02	6.52	6.52	6.12	6.12	6.04	6.04	5.46	0.713	6.25	6.73	6.73	5.9	0.629	5.86	5.88	5.88	5.88	6.02
Temperature	*	Celsius	20.32	20.32	15.30	15.30	23.85	23.85	21.50	21.50	25.93	19.65	27.39	17.29	17.29	23.33	18.42	25.86	21.87	23.16	23.16	20.39
Turbidity	*	NTU	8.70	8.70	79.30	79.30	>999	>999	9.70	9.70	67.6	289	67	NM	NM	6.5	3	9.36	63.2	68.3	68.3	2.34
Monitored Natural Attenuation Parameters																						
Carbon Dioxide	*	µg/L	621	713	270	270	400	370	7,100 B	7,000 B	5,500 B	4,600	4,500 B	4,700	4,300	4,600	4,400	3,900	< 1000	< 1000	< 1000	--
Iron, as Ferrous (Fe+2)	*	mg/L	45	52.5	14 HF	14 HF	48 HF	44 HF	52 HF	55 HF	56 HF	28 HF	50 HF	59 HF	59 HF	59 HF	36 HF	31	78.0	67.6	70.5	76.2
Methane	*	µg/L	8,700	16,000	10,000	9,500	9,300	11,000	7,100	7,800	6,500	8300	7400	14000	14000	12000	10000	3300	9,100	11,000	12,000	15,000
Nitrate	*	mg/L	< 0.25	< 0.25	< 2.5	< 2.5	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25	< 0.25
Oxygen	*	mg/L	< 1.00	1.01 H	2.0	2.3	1.5	2.1	1.2	1.1	0.82	0.84	0.81	0.74	0.87	0.53	0.75	0.49	0.73	1.0	0.72	0.24 J
Sulfate	*	mg/L	< 1.0	< 1.0	< 100	< 100	< 5.0	< 5.0	< 2.6	< 2.6	< 2.6	< 2.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	1.3	< 1.0	< 1
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 2,000	< 2,000	< 2,000	< 100	< 100	< 250	< 100	< 100	< 1000	< 2000	< 2000	< 2000	< 2000	< 1000	**120**	< 5,000 J	< 5,000 J	< 50
Benzene	5	µg/L	**430**	**450**	**430**	**400**	**410**	**370 D**	**440**	**510**	**420**	**530**	**430**	**720**	**690**	**500**	**430**	**680**	**1,300**	**660**	**660**	**1,000**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 100	<100	< 100	< 5.0	< 12	< 30	< 12	< 12	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	**1,500**	**1,600**	**2,600**	**2,700**	**1,100**	**850 D**	**1,600**	**1,600**	**1,400**	**1,700**	**1000**	**1900**	**1800**	**1400**	**1100**	**1800**	**1,400**	**2,400**	**2,400**	**3,300**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 100	<100	< 100	< 5.0	< 20	< 50	< 20	< 20	< 100	< 100	< 100	< 100	< 100	< 50	< 5.0	< 5	< 5	< 5
Toluene	1,000	µg/L	**67**	**69**	**170**	**210**	< 100	**54**	**72 J**	**120 J**	**110**	**140**	**120**	**250**	**230**	**160**	**170**	**280**	**310**	**390**	**400**	**860**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 100	<100	< 100	< 5.0	< 2.6	< 6.5	< 2.6	< 2.6	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	**1,000**	**1,100**	**2,400**	**2,600**	**780**	**520**	**1,200**	**1,200**	**1,100**	**1,600**	**880**	**1800**	**1800**	**1200**	**1000**	**1600**	**2,100**	**2,300**	**2,400**	**3,700**
Semivolatile Organic Compounds																						
Acenaphthene	2,000	µg/L	**130**	**130**	**3,800**	**6,200**	< 190	190	**200**	**180**	**140**	**4,300**	**110**	**570**	**120**	**110**	**63**	**49**	**83**	**79**	**92**	**110**
Acenaphthylene	10	µg/L	**13**	**13**	**1,900**	**3,100**	< 190	< 190	**67**	**39**	**88**	**2,700**	**53**	**640**	**130**	**82**	**44**	**46**	**64**	**61**	**71**	**130**
Anthracene	10	µg/L	**7.4**	**7.4**	**2,000**	**3,200**	< 190	< 190	**43**	**11**	**39**	**2,800**	**14**	**400**	**49**	**22**	6.5 J	4.4	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	**1.5**	**1.6**	**1,300**	**2,100**	< 190	< 190	**35**	**2.9**	**25**	**1,300**	**6.6**	**210**	<19	**12**	< 38	< 4.2	**1.1**	**1.0**	**1.1**	**0.14**
Benzo(a)pyrene	0.2	µg/L	**1.4**	**1.4**	**1,100**	**1,900**	< 190	< 190	**35**	**3.0**	**20**	**1,200**	**5.4**	**190**	<19	**7.9**	< 38	< 4.2	**0.85**	**0.53**	**0.59**	**0.16**
Benzo(b)fluoranthene	0.2	µg/L	**1**	**1**	**1,100**	**1,800**	< 190	< 190	**27**	**2.4**	< 2.0	**520**	< 1.9	<100	<19	**7.9**	< 38	< 4.2	**0.58**	**0.48**	**0.51**	**0.1**
Benzo(g,h,i)perylene	10	µg/L	**0.61**	**0.61**	**330**	**530**	< 190	< 190	**14**	**1.5 J**	**5.7**	**380**	1.7 J	<100	<19	< 3.8	< 38	< 4.2	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	**0.4**	**0.47**	<21	<22	< 190	< 190	**13**	**1.1 J**	**16**	**720**	**3.3**	<100	<19	< 3.8	< 38	< 4.2	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	**1.1**	**1.2**	**960**	**1,600**	< 190	< 190	**28**	**2.6**	**19**	**1,100**	**5.3**	**190**	<19	**10**	< 38	< 4.2	**0.78**	**0.58**	**0.62**	**0.16**
Dibenzo(a,h)anthracene	0.3	µg/L	**0.13**	**0.14**	**130**	<22	< 190	< 190	**4.5**	< 1.1	**2.1 J**	< 110	< 1.9	<100	<19	< 3.8	< 38	< 4.2	<0.1	<0.1	< 10	< 0.1
Fluoranthene	1,000	µg/L	**4.1**	**4**	**2,400**	**3,800**	< 190	< 190	**53**	**7.9**	**37**	**2,500**	**12**	**410**	**36**	**23**	**4.0 J**	**1.6**	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**38**	**38**	**3,000**	**5,100**	< 190	< 190	**92**	**63**	**130**	**4,600**	**55**	**650**	**82**	**67**	**25 J**	**25**	**34**	**34**	**40**	**50**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.49**	**0.51**	**330**	**480**	< 190	< 190	**12**	**1.3 J**	**5.5**	**310**	1.5 J	<100	<19	< 3.8	< 38	< 4.2	**0.30**	**0.22**	**0.23**	**0.11**
Naphthalene	20	µg/L	**4,900**	**4,300**	**29,000**	**50,000**	**4,100**	**4,700**	**6,300**	**7,700**	**3,900**	**46,000**	**3,400**	**9,200**	**6,100**	**5,200**	**3,100**	**3,300**	**4,300**	**4,100**	**4,000**	**4,800**
Phenanthrene	10	µg/L	**38**	**37**	**7,700**	**13,000**	< 190	< 190	**170**	**65**	**170**	**7,800**	**67**	**1,200**	**140**	**89**	**30 J**	**23**	**34**	**31**	**37**	**51**
Pyrene	1,000	µg/L	**6.3**	**6.3**	**3,700**	**6,100**	< 190	< 190	**68**	**10**	**72**	**3,800**	**20**	**670**	**47**	**40**	5.4 J	**2.4**	< 10	< 10	< 10	< 10
Inorganic Compounds																						
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	**0.0070 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.671**	**0.665**	**0.59**	**0.58**	**0.68**	**0.67**	**0.66**	**0.71**	**0.64**	**0.63**	**0.74**	**0.68**	**0.69**	**0.74**	**0.66**	**0.68**	**0.612**	**0.648**	**0.632**	**0.694**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00050 J**	**0.00052 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00020 J**	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.00062	< 0.0050	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0019 J**	**0.0020 J**	**0.0045 J**	**0.0085 J**	**0.023**	<0.010	<0.010	**0.046**	**0.0017 JB**	**0.0021 J**	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0027 J**	**0.0080 JB**	**0.015 J**	<0.020	<0.020	**0.039**	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	**0.012**	**0.018**	**0.013**	**0.012**	**0.011**	**< 0.010**	**0.0080 J**	**0.010**	**0.014**	**0.012**	**0.01**	**0.016**	**0.013**	**0.018**	**0.012**	**0.014**	**0.013**	< 0.010	< 0.010	0.008
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	**0.0049 J**	**0.0047 J**	**0.0072 J**	< 0.040	< 0.040	< 0.040	**0.0017 J**	**0.0030 J**	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	**0.0030 J**	**0.0063 J**	**0.02**	**0.014**	<0.010	**0.047**	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	**0.013 J**	**0.023**	<0.020	<0.020	**0.048**	< 0.020	< 0.020	< 0.0200	**0.0354**	**0.0256**	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Sample not collected due to DNAPL
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-505D																			
		Sample Date	1/15/2015	7/15/2014	1/8/2014	7/11/2013	1/8/2013	7/26/2012	1/24/2012	7/5/2011	07/11 DUP	1/18/2011	7/14/2010	1/6/2010	7/28/2009	07/09 DUP	01/09 DUP	1/20/2009	7/15/2008	1/9/2008	7/11/2007	2/15/2007
		Unit	Post-ISCO																			
Field Parameters																						
Conductivity	*	mS/cm	0.434	0.660	0.591	0.631	0.523	0.565	0.307	0.558	0.558	2.240	0.540	0.432	0.538	0.538	4.420	4.420	0.514	0.607	0.554	0.649
Dissolved Oxygen (YSI)	*	mg/L	0.29	0.10	0.90	0.22	0.44	1.32	3.82	0.23	0.23	6.4	0.64	0.51	3.17	3.17	6.1	6.1	0.23	0.22	0.28	0.64
Oxidation Reduction Potent	*	mV	-67	-67.3	-37.8	-44.8	8.7	-33.0	-18.2	-34.9	-34.9	-47.8	-167.7	2.9	-9.0	-9.0	100	100	-179.4	-59.0	-9.6	-35.0
pH	*	SU	6.07	6.15	6.15	6.14	6.05	6.26	6.29	6.15	6.15	0.484	6.18	6.82	6.28	6.28	0.422	0.422	6.08	6.11	6.08	6.15
Temperature	*	Celsius	15.7	22.37	18.21	21.77	17.92	22.01	20.25	23.87	23.87	17.63	22.14	14.21	22.53	22.53	15.99	15.99	22.56	19.12	22.09	17.49
Turbidity	*	NTU	9.8	6.69	7.15	4.40	0.70	3.01	8.71	5.77	5.77	22.9	6.7	5.23	5.8	5.8	2.9	2.9	9.63	5.28	4.2	6.87
Monitored Natural Attenuation Parameters																						
Carbon Dioxide	*	µg/L	499	285	632	375	240	140	2,600 B	2,400 B	2,200 J B	2,100	2,100 B	1,400	1,800 *	1,800 *	1,100	910	1,600	< 1,000	< 1,000	--
Iron, as Ferrous (Fe+2)	*	mg/L	23.4	38.1	30.6	31.6 H	27 HF	14 HF	5.8 HF	13 HF	13 HF	23 HF	21 HF	23 HF	6.2 HF	7.3 HF	< 0.10 HF	< 0.10 HF	19	23.4	29.0	28.5
Methane	*	µg/L	9,800	7,000	6,400	6,900	6,100	1,500	1,100	1,900	1,300	2,500	1700	1400	440	< 0.19	1000	270	350	1,000	2,900	2,400
Nitrate	*	mg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.075	0.12 J	< 0.075	< 0.36	< 1.1	< 1.1	< 1.1	< 1.1	< 0.050	< 0.050	< 0.50	< 0.25	< 0.25	< 0.25
Oxygen	*	mg/L	7.58 H	4.81 H	6.54 H	5.10 H	4.6	6.3	1.6	1.4	1.5	1.2	1.3	2.0	1.1	1.1	1.4	1.4	1.0	1.6	0.99	1.5
Sulfate	*	mg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 2.6	3.9 J	4.0 J	5.3	8.2	11	16	17	17	18	21	30	20	17
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	**5.5 J**	< 5.0	< 5.0	**7.8 J**	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 250	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.2 J**	**2.2 J**	**2.5 J**	**2.5 J**	**1.8 J**	< 5.0	< 5.0	< 5.0	**2.6 J**	**1.8 J**	**3.1 J**	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	**13**	**34**	**67**	**64**	**79**	< 5.0	**0.35 J**	**0.17 J**	**0.21 J**	**0.25 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**3.4 J B ***	**2.8 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.53 J**	**0.58 J**	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**11**	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	**6.8**	**14**	**59**	**43**	**61**	< 5.0	**0.96 J**	**0.31 J**	**0.55 J**	**0.91 J**	**0.27 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																						
Acenaphthene	2,000	µg/L	< 0.50	**47**	**55**	**56**	**6.6**	**36**	**87**	**51**	**71**	**63**	**36**	**48**	**51 D**	**52 D**	**34**	**29**	**54**	**53**	**37**	**33**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	**1.1**	**2.5**	< 2.0	**7.7**	**7.6**	**14**	**18**	**17**	**14**	**23**	**26 D**	**25 D**	**17**	**16**	**14**	**40**	**20**	**20**
Anthracene	10	µg/L	< 0.050	**0.8**	**1.3**	**1.0**	< 2.0	< 1.9	**0.54**	**0.16 J**	**0.26**	**0.14 J**	< 0.19	<0.99	< 0.19	< 0.20	**0.055 J**	**0.056 J**	**0.064 J**	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	**0.29**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	**0.051**	**0.16**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	**0.36**	< 0.10	< 0.10	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	**0.11**	< 0.10	< 0.10	< 0.10	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	**0.3**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	**0.38**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.048	< 0.068	< 0.10	< 0.043	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	**0.11**	**0.31**	< 0.10	< 0.10	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	**0.8**	**1.1**	**1.3**	< 2.0	< 1.9	**0.92**	**0.70**	**0.90**	**0.78**	**0.59**	**1.1**	**0.87**	**0.8**	**0.37**	**0.3**	**0.31**	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	**6.1**	**9.5**	**12**	< 2.0	**5.3**	**13**	**10**	**14**	**10**	**3.5**	**5.4**	**7.1**	**7.2**	**4.5**	**3.9**	**5.2**	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.10**	**0.054**	< 0.050	< 0.050	< 2.0	< 1.9	< 0.11	< 0.15	< 0.10	< 0.096	< 0.19	<0.99	< 0.19	< 0.20	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**4.2**	**590**	**840**	**870**	**83**	**49**	**15**	**5.0**	**6.3**	**4.5**	0.18 J	<0.99	< 0.19	< 0.20	**2.3**	**2.3**	**0.16 J**	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.50	**4.1**	**8.1**	**7.1**	< 2.0	< 1.9	**2.7**	**0.70**	**1.2**	**0.49**	< 0.19	<0.99	< 0.19	< 0.20	**0.061 J**	**0.058 J**	**0.074 J**	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	**0.99**	**1.2**	**1.1**	< 2.0	< 1.9	**0.87**	**0.67**	**0.93**	**0.84**	**0.66**	**1.1**	**0.98**	**0.92**	**0.33**	**0.3**	**0.35**	< 10	< 10	< 10
Inorganic Compounds																						
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.342**	**0.468**	**0.373**	**0.395**	**0.34**	**0.32**	**0.23**	**0.45**	**0.42**	**0.33**	**0.46**	**0.44**	**0.44**	**0.44**	**0.36**	**0.3**	**0.33**	**0.314**	**0.458**	**0.436**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0012 J**	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.026**	**0.0057 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0092 J**	**0.0033 J**	< 0.0023	**0.0035 J**	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0046 J**	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0202**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.022**	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.010 J**	**0.013 J**	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-1
Summary of Historical Groundwater Sampling Data - Alluvium, Galliard, and Saprolite Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-600								MW-601									MW-602								MW-603					
			1/14/2015	7/16/2014	1/8/2014	7/11/2013	07/13 DUP	1/10/2013	7/26/2012	1/25/2012**	1/14/2015	7/16/2014	1/8/2014	7/11/2013	1/10/2013	7/25/2012	1/19/2012	7/6/2011	1/20/2011	1/13/2015	7/15/2014	1/7/2014	7/9/2013	1/7/2013	7/23/212	1/17/2012	7/6/2011	1/18/2011	7/11/2013	1/9/2013	7/26/2012	1/17/2012	7/6/2011	1/18/2011
			Post-ISCO								Post-ISCO									Post-ISCO													
Field Parameters																																	
Conductivity	*	mS/cm	0.257	0.529	0.416	0.293	0.293	0.396	0.375	0.430	0.529	0.565	0.421	0.543	0.569	0.658	0.649	0.645	0.46	0.613	0.683	0.627	0.193	0.576	0.683	0.82	0.801	0.704	1.030	0.896	0.484	0.874	0.918	0.839
Dissolved Oxygen (YSI)	*	mg/L	0.18	0.43	0.58	0.26	0.26	0.79	1.2	0.46	0.28	0.23	0.24	0.34	0.19	2.94	0.15	0.25	0.22	0.62	0.12	0.47	0.12	0.37	0.23	0.76	0.35	0.42	0.17	0.61	0.93	7.19	0.11	0.51
Oxidation Reduction Poten	*	mV	-71.3	-73.9	-43.7	-24.1	-24.1	8.7	-32.1	-29.0	-42.8	-137.3	-66.0	-121.2	-103.8	-81.0	-80.0	-84.5	-77.0	-33	-56.6	-30.5	-30.1	-7.1	-73.8	-89.3	-47.7	-81.7	-63.7	4.3	-34.8	-60.2	-57.5	-51.1
pH	*	SU	6.1	6.33	6.45	6.70	6.70	6.61	6.70	6.22	5.92	6.05	6.22	6.01	5.96	5.22	6.16	6.00	5.85	5.77	6.00	6.05	6.79	6.07	5.46	6.48	6.10	6.55	5.89	6.19	6.02	6.56	6.01	5.9
Temperature	*	Celsius	17.9	22.93	21.27	21.54	21.54	26.44	24.33	22.87	15.8	23.11	18.95	21.41	22.47	25.42	22.04	22.88	19.84	17.4	22.36	18.36	24.76	18.15	24.51	20.97	23.69	17.93	23.02	19.27	25.63	18.84	22.66	17.21
Turbidity	*	NTU	53	45.8	19.9	9.60	9.60	24.20	8.05	> 999	3.12	8.56	8.79	8.16	9.14	3.27	1.1	26.2	16.9	15.5	9.45	4.16	5.42	2.04	2.59	8.17	181	7.34	1.28	3.79	5.02	6.36	31.7	6.68
Monitored Natural Attenuation Parameters																																	
Carbon Dioxide	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron, as Ferrous (Fe+2)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds																																	
Acetone	4,000	µg/L	< 25,000	< 25,000	< 2,500	< 2,500	< 2,500	< 20,000	< 5,000	< 100	< 5,000	< 5,000	< 5,000	< 2,500	< 2,500	< 25,000	< 1,300	**740 J**	< 500	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0
Benzene	5	µg/L	**25,000**	**25,000**	**20,000**	**7,000**	**5,900**	**26,000**	**48,000 D**	**440**	**6,900**	**31000**	**18,000**	**18,000**	**28,000**	**27,000**	**21,000**	**22,000 D**	**14,000**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**110**	**2.1 J**	< 0.25	**1,300**	< 5.0	< 5.0	< 5.0	**2.0 J**	**2.3 J**	**3.5 J**
Carbon Disulfide	4,000	µg/L	< 2,500	< 2500	< 250	< 250	< 250	<1,000	< 250	< 12	< 500	< 500	< 500	< 250	<130	< 1,300	< 150	< 60	< 60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 6.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60
Ethylbenzene	700	µg/L	< 250	< 2500	**2,400**	**990**	**760**	**1,300**	**1,300**	**1,600**	**960**	**1,600**	**1,300**	**1,000**	**950**	< 1,300	**950 J**	**890**	**440 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3.0 J**	**0.11 J**	< 0.11	**38 J**	**74**	**82**	**88**	**120**	**98**	**110**
Methylene Chloride	5	µg/L	< 5.0	< 2500	< 250	< 250	< 250	<1,000	< 250	< 20	< 5.0	< 500	< 500	< 250	<130	< 1,300	< 250	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J**	< 1.0
Toluene	1,000	µg/L	**8,500**	**17,000**	**12,000**	**5,300**	**4,300**	**12,000**	**24,000 D**	**72 J**	**2,100**	**16,000**	**6,100**	**8,700**	**13,000**	**11,000**	**8,800**	**10,000**	**7,400**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.34 J**	< 0.33	< 0.33	< 3.3	< 5.0	< 5.0	< 5.0	**3.0 J**	**2.4 J**	**2.7 J**
Trichloroethylene	5	µg/L	< 2,500	< 2500	< 250	< 250	< 250	<1,000	< 250	< 2.6	< 500	< 500	< 500	< 250	<130	< 1,300	< 33	< 13	< 13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 1.3	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13
Xylenes, total	2,000	µg/L	2,600	**4,600**	**3,700**	**2,100**	**1,600**	**3,000**	**5,100 D**	**1,200**	**1,900**	**4,200**	**2,500**	**3,400**	**3,700**	**3,800**	**3,300**	**3,700**	**3,000**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.5 J**	**0.45 J**	< 0.20	**30 J**	**39**	**40**	**51**	**69**	**45**	**63**
Semivolatile Organic Compounds																																	
Acenaphthene	2,000	µg/L	**14**	**9.2**	**21**	**6.2**	**6.3**	< 22	< 190	**200**	**12**	**4.6**	**14**	**18**	**19**	< 210	**18**	**12**	**16**	**1.6**	**1.9**	**3.5**	< 0.50	**4.3**	**11**	**6.7**	**4.3**	**0.5**	**40**	**100**	< 190	**85**	**64**	**64**
Acenaphthylene	10	µg/L	**120**	**210**	**190**	**53**	< 100	**93**	< 190	**67**	**45**	**70**	**50**	**64**	**81**	< 210	**75**	**65**	**68**	< 1.0	< 1.0	< 1.0	< 1.0	< 0.22	< 0.50	**0.18 J**	**0.23**	**34**	< 1.0	**31**	< 190	**4.1**	**1.9**	**1.3 J**
Anthracene	10	µg/L	**2.4**	**8.9**	**5.6**	**1.5**	**1.7**	< 22	< 190	**43**	**4.4**	**4.7**	**7.7**	**6.7**	< 19	< 210	**7.1 J**	**5.2 J**	**5.5**	**0.1**	**0.17**	**0.16**	< 0.050	< 0.22	< 0.50	< 0.10	**0.10 J**	**0.43**	**1.6**	<10	< 190	< 1.0	**3.3**	**3.8**
Benz(a)anthracene	0.1	µg/L	**0.38**	**2.8**	**0.97**	< 0.50	**0.31**	< 22	< 190	**35**	< 0.050	**0.24**	**0.4**	< 0.50	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	**0.11 J**	< 0.99
Benzo(a)pyrene	0.2	µg/L	**0.3**	**2.1**	**0.72**	< 0.50	**0.23**	< 22	< 190	**35**	< 0.050	< 0.050	< 0.050	< 0.50	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	< 0.095	< 0.99
Benzo(b)fluoranthene	0.2	µg/L	**0.28**	**1.8**	**0.47**	< 1.0	**0.19**	< 22	< 190	**27**	< 0.10	< 0.10	< 0.1	< 1.0	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.10	<10	< 190	< 1.0	< 0.095	< 0.99
Benzo(g,h,i)perylene	10	µg/L	**0.16**	**0.79**	**0.26**	< 1.0	< 0.10	< 22	< 190	**14**	< 0.10	< 0.10	< 1.0	< 1.0	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.10	<10	< 190	< 1.0	< 0.095	< 0.99
Benzo(k)fluoranthene	10	µg/L	**0.085**	**0.68**	**0.18**	< 0.50	**0.096**	< 22	< 190	**13**	< 0.050	< 0.050	< 0.050	< 0.50	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	< 0.095	< 0.99
Chrysene	0.2	µg/L	**0.3**	**2.1**	**0.66**	< 0.50	**0.26**	< 22	< 190	**28**	< 0.050	< 0.050	< 0.050	< 0.50	<1.9	< 210	< 2.2	< 2.1	< 0.45	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.23	< 0.046	< 0.045	< 0.045	< 0.050	<10	< 190	< 0.46	**0.078 J**	< 0.44
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	**0.2**	< 0.10	**< 1.0**	< 0.10	< 22	< 190	**4.5**	< 0.10	< 0.10	< 0.1	< 1.0	< 19	< 210	< 4.8	< 4.7	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.10	<10	< 190	< 1.0	< 0.095	< 0.99
Fluoranthene	1,000	µg/L	**1.2**	**6.9**	**3.2**	**1.0**	**1.2**	< 22	< 190	**53**	**0.49**	**0.4**	**0.67**	< 1.0	< 19	< 210	< 4.8	< 4.7	**2.3**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.50	**0.14 J**	< 0.095	**0.11 J**	**0.78**	<10	< 190	< 1.0	**1.1**	**1.0 J**
Fluorene	1,000	µg/L	**20**	**48**	**39**	**12**	**16**	< 22	< 190	**92**	**36**	**0.19**	**42**	**53**	**64**	< 210	**63**	**50**	**60**	0.22	**0.31**	**0.69**	< 0.10	**0.55**	**1.6**	**0.47**	**0.64**	**5.5**	**9.3**	**29**	< 190	**20**	**21**	**22**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.11**	**0.69**	**0.21**	< 0.50	**0.065**	< 22	< 190	**12**	< 0.050	< 0.050	< 0.050	< 0.50	<1.9	< 210	< 4.8	< 4.7	< 1.0	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	< 0.10	< 0.050	<10	< 190	< 1.0	< 0.095	< 0.96
Naphthalene	20	µg/L	**5,400**	**10,000**	**7,700**	**2,500**	**2,900**	**5,700**	**8,200**	**6,300**	6,500	**8,700**	**8,400**	**9,900**	**11,000**	**11,000**	**770**	**8,900**	**9,800**	<500	< 0.50	< 0.50	< 0.50	< 0.22	**65**	**0.34**	**0.15 J**	**330**	**490**	**1,000**	**1,100**	**1,400 D**	**840**	**930**
Phenanthrene	10	µg/L	**15**	**53**	**36**	**9.8**	**9.6**	< 22	< 190	**170**	**17**	**16**	**25**	**25**	**35**	< 210	**38**	**25**	**44 ***	< 0.50	< 0.050	< 0.050	< 0.050	< 0.22	< 0.50	< 0.10	< 0.095	**1.2**	**8.4**	**22**	< 190	**13**	**16 J**	**18**
Pyrene	1,000	µg/L	**1.8**	**8.5**	**3.8**	**1.2**	**1.4**	< 22	< 190	**68**	**0.47**	**0.49**	**1**	**0.76**	< 19	< 210	< 4.8	< 4.7	**1.5 J**	< 0.050	**0.054**	**0.08**	< 0.050	< 0.22	< 0.50	**0.22**	**0.11 J**	**0.12 J**	**0.71**	<10	< 190	< 1.0	**1.4**	**1.3 J**
Inorganic Compounds																																	
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	**0.0096 J**	**0.011 J**	**0.0054 J**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	**0.0048 J**
Barium	2	mg/L	**0.157**	**0.315**	**0.197**	**0.0615**	**0.0613**	**0.097**	**0.25**	**0.66**	**0.275**	**0.169**	**0.249**	**0.270**	**0.28**	**0.29**	**0.3**	**0.27**	**0.2**	**0.491**	**0.553**	**0.583**	**0.137**	**0.38**	**0.4**	**0.57**	**0.61**	**0.36**	**0.808**	**0.67**	**0.74**	**0.84**	**0.82**	**0.75**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	**< 0.00020**	**0.00029 JB**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	**0.00048 J**	< 0.00020	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0019 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0019 J**	**0.0041 J**	**0.0022 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	**0.0031 J**	**0.0045 J**	< 0.0012	< 0.0100	< 0.010	< 0.010	**0.0016 J**	**0.0034 J**	**0.0022 J**
Copper	1.3	mg/L	**0.0312**	< 0.0100	**0.0351**	**0.0292**	**0.0298**	**0.021**	< 0.020	< 0.0019	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0073 J**	**0.0062 JB**	**0.0221**	< 0.0100	< 0.0100	**0.0117**	< 0.020	**0.0049 J**	< 0.0019	**0.02**	< 0.0019	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0024 J**	< 0.0019
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0080 J**	**0.022**	**0.048**	**0.025**	**0.026**	**0.035**	**0.041**	**0.048**	**0.061**	**0.029**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.0050	**0.01**	< 0.0050
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	**0.0088 J**	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0034 J**	**0.0026 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0024 J**	< 0.0023	**0.0027 J**	< 0.0023	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	**0.0102**	< 0.0100	< 0.0100	< 0.0100	<0.010	**0.015**	< 0.0024	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0024 J**	**0.0040 J**	**0.0029 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	**0.0044 J**	< 0.0024	**0.013**	< 0.0024	< 0.0100	< 0.010	< 0.010	**0.0024 J**	**0.0035 J**	< 0.0024
Zinc	2	mg/L	**0.208**	**0.058**	**0.288**	**1.53**	**1.59**	**0.099**	**0.15**	< 0.0087	**0.0379**	**0.0564**	**0.121**	**0.0291**	**0.077**	< 0.020	< 0.0087	**0.029**	**0.028**	**0.165**	**0.0299**	**0.0432**	**0.583**	**0.4**	**0.17**	< 0.0087	**0.19**	< 0.0087	< 0.0200	**0.021**	< 0.020	< 0.0087	**0.02**	< 0.0087

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
** Monitoring well had NAPL detected

JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Summary of Historical Groundwater Sampling Data – Transition Zone and Bedrock Monitoring Wells

Appendix E2

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-213																		
		Sample Date	1/13/2015	7/15/2014	1/8/2014	7/10/2013	1/9/2013	7/25/2012	1/18/2012	7/5/2011	1/19/2011	7/13/2010	1/12/2010	7/22/2009	1/20/2009	7/23/2008	1/10/2008	8/21/2007**	7/11/2007	2/13/2007	10/3/2006	4/4/2002
		Unit	During Extraction																		Pre-Extraction	
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	<2,500	< 50	< 5,000	< 5,000	< 250	< 250	< 250	< 5000	< 5000	< 1000	< 1000	< 5000	< 50	< 5,000	< 50	< 50	50 U	--
Benzene	5	µg/L	**8,900**	**950**	**6,000**	**7,100**	**8,300**	**6,500**	**5,100**	**6,700**	**6,000**	**5,100**	**6,500**	**4,500**	**870**	**4,600**	**4,300**	**2,500**	--	**750**	5 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	<250	< 5.0	< 250	< 250	< 30	< 30 *	< 30	< 250	< 250	< 50	< 50	< 250	< 5.0	< 500	< 5	< 5	5 U	--
Ethylbenzene	700	µg/L	**1,500**	**110**	**1,300**	**1,300**	**1,600**	**1,100**	**1,000**	**1,200**	**1,400**	**1,100**	**1,700**	**1,300**	**260**	**930**	**1,300**	**740**	--	**470**	5 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	<250	< 5.0	< 250	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 250	< 5.0	< 500	< 5	< 5	5 U	5.0 U
Toluene	1,000	µg/L	**460**	**59**	**800**	**720**	**640**	**670**	**710**	**960**	**950**	**810**	**1,700**	**1,400**	**5.3 J**	**1,400**	**1,700**	**1,200**	--	**590**	5 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	<250	< 5.0	< 250	< 250	< 6.5	< 6.5	< 6.5	< 250	< 250	< 50	< 50	< 250	< 5.0	< 500	< 5	< 5	5 U	1.0 U
Xylenes, total	2,000	µg/L	**1,300**	**95**	**1,300**	**1,800**	**1,400**	**1,100**	**950**	**1,100**	**1,500**	**1100**	**2100**	**1500**	**330**	**1200**	**1,500**	**1,600**	--	**370**	5 U	--
Semivolatile Organic Compounds																						
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	2,000	µg/L	**180**	**9.1**	**52**	**63**	< 220	< 210	**67**	**32**	**25**	**29**	**54**	**58**	**28**	**16**	**35 J**	--	**20**	**15**	10 U	10 U
Acenaphthylene	10	µg/L	**180**	< 1.0	<1,000	**82**	< 220	< 210	**170**	**86**	**53**	**38**	**98**	**100**	**2.6**	**55**	**140 J**	--	**81**	**40**	10 U	**0.81 J**
Anthracene	10	µg/L	**7.9**	**0.43**	**3.1**	**2.7**	< 220	< 210	**4.1**	**2.3**	< 10	**1.1 J**	**2.8**	< 9.7	**0.27 J**	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Benzo(a)anthracene	0.1	µg/L	< 0.5	< 0.050	**0.058**	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.10	--	< 0.1	< 0.1	0.1 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.043	< 0.043	< 4.5	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.1	--	< 0.1	< 0.1	0.1 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	1,000	µg/L	**1.3**	< 0.10	**0.77**	**0.59**	< 220	< 210	**1.1 J**	**0.40**	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 10	--	< 10	< 10	10 U	10 U
Fluorene	1,000	µg/L	**51**	**1.3**	**15**	**23**	< 220	< 210	**20**	**20**	**11 J**	**9.4**	**24**	**25**	**3.5**	**8.5 J**	**21 J**	--	< 10	< 10	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 220	< 210	< 0.096	< 0.095	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	< 0.050	--	< 0.05	< 0.05	0.05 U	10 U
Naphthalene	20	µg/L	**14,000**	< 0.50	**6,400**	**6,700**	**5,900**	**6,000**	**1,600 D**	**4,200**	**4,400**	**2,400**	**6,500**	**8,500**	**850**	**3,700**	**7,600 J**	--	**3,600**	**2,500**	10 U	**5.9 J**
Phenanthrene	10	µg/L	**52**	**0.83**	**23**	**22**	< 220	< 210	**34**	**18**	**12 J**	**7.3**	**21**	**24**	**1.2 J**	**6.7 J**	**17 J**	--	< 10	< 10	10 U	**1.2 J**
Pyrene	1,000	µg/L	**1.3**	< 0.050	**0.75**	**0.57**	< 220	< 210	**1.1 J**	**0.47**	< 10	< 1.9	< 1.9	< 9.7	< 1.9	< 9.7	<10	--	< 10	< 10	10 U	10 U
Inorganic Compounds																						
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	--
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	--	< 0.05	< 0.05	0.05 U	--
Barium	2	mg/L	**0.927**	**0.658**	**0.846**	**0.912**	**0.90**	**0.96**	**0.87**	**0.89**	**0.85**	**0.79**	**0.95**	**0.82**	**0.62**	**0.85**	**0.815**	--	**0.626**	**0.573**	**0.155**	--
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00033 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	--
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0017 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0033 JB**	< 0.020	< 0.020	< 0.020	**0.016 J**	< 0.020	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Cyanide	0.2	mg/L	**0.014**	< 0.010	**0.016**	< 0.010	**0.015**	**0.021**	**0.017**	**0.034**	**0.010**	**0.011**	< 0.010	< 0.010	< 0.010	**0.0094 J**	< 0.010	--	< 0.002	< 0.002	0.01 U	--
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	--
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0024 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	--	< 0.02	< 0.02	0.02 U	--
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	--
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1	0.001 U	--
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0024 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010	0.01 U	--
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.011 J**	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	**0.012 J**	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	--

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-305								
		Sample Date	1/21/2005	7/15/2004	1/23/2004	7/17/2003	1/15/2003	7/10/2002	1/21/2002	7/16/2001	1/24/2001
		Unit	Pre-Extraction								
Volatile Organic Compounds											
Acetone	4,000	µg/L	120 U	120 U	120 U	25 U	120 U	120 U	120 U	120 U	25 U
Benzene	5	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	**0.59 J**	5.0 U	**0.13 J**
Carbon Disulfide	4,000	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	1.0 U
Ethylbenzene	700	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.24 J**
Methylene Chloride	5	µg/L	25 U	25 U	25 U	5.0 U	25 UJ	25 U	25 U	25 U	5.0 U
Toluene	1,000	µg/L	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
Trichloroethylene	5	µg/L	**39**	**34**	**36**	**44**	**32**	**3**	**32**	**36**	**34**
Xylenes, total	2,000	µg/L	10 U	10 U	10 U	2.0 U	10 U	10 U	10 U	10 U	2.0 U
Semivolatile Organic Compounds											
2-Methylnaphthalene	*	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	0.1	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds											
Aluminum (fume or dust)	*	mg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	**0.24**	0.2 U	**0.045 B**	**0.051 B**
Antimony	0.01	mg/L	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.098**	**0.11**	**0.1**	**0.1**	**0.10**	**0.1**	**0.11**	**0.099**	**0.099**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**24**	**23**	**24**	**22**	**23**	**24**	**24**	**23**	**23**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	**0.0050 B**	**0.0066 B**	**0.004 B**	**0.0042 B**	**0.0034 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.0011 U	0.02 U	**0.0013 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	**0.04**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	0.05 U	0.05 U	0.05 U	0.04 U	**0.031 B**	**0.34**	**0.048 B**	**0.062**	**0.034 B**
Lead	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.002 B**	0.005 U	0.005 U
Magnesium	*	mg/L	**13**	**12**	**12**	**12**	**12**	**12**	**13**	**12**	**12**
Manganese	*	mg/L	**0.66**	**0.61**	**0.66**	**0.61**	**0.66**	**0.68**	**0.72**	**0.82**	**0.68**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.6**	**2.7**	**2.4**	**2.8**	**2.4**	**2.5**	**2.5**	**2.4**	**2.4**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**53**	**56**	**50**	**53**	**54**	**51**	**57**	**55**	**55**
Thallium	0.002	mg/L	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.003 B**	**0.0025 B**	**0.0029 B**	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	**0.02**	0.020 U	0.02 U	**0.0067 B**	0.02 U	**0.012 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306BR																
		Sample Date	1/14/2015	7/15/2014	1/8/2014	7/9/2013	1/9/2013	7/25/2012	1/17/2012	7/5/2011	1/20/2011	7/20/2010	1/7/2010	7/22/2009	1/19/2009	7/16/2008	1/8/2008	7/10/2007	2/24/2007	02/07 DUP
		Unit	During Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 50	< 25	< 25	< 1000	< 1000	< 1000	< 1000	< 100	< 50	< 50	< 50 R	< 50
Benzene	5	µg/L	< 5.0	**300**	**500**	< 5.0	< 5.0	**68**	**720**	**390**	**480**	**730**	**1,000**	**1,500**	**1,400**	**810**	< 5.0	**3,200**	**7,300**	**7,300**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 3.0 *	< 3.0	< 50	< 50	< 50	< 50	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**4.6 J**	**1.1 J**	**1.3 J**	**2.8 J**	< 50	< 50	< 50	**1.6 J**	< 5.0	**5.5**	**260**	**270**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 50	< 50	< 50	< 50	< 5.0	< 5.0	< 5	< 5 UJ	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 3.3	< 1.7	< 1.6	< 50	< 50	< 50	< 50	**0.5 J**	< 5.0	< 5	**5.3**	**5.2**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.65	< 0.65	< 50	< 50	< 50	< 50	< 5.0	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**5.6 J**	**3.0 J**	**7.9 J**	**17 J**	< 50	< 50	17 J	**11**	< 5.0	**66**	**210**	**200**
Semivolatile Organic Compounds																				
Acenaphthene	2,000	µg/L	**5.3**	**11**	< 0.50	< 0.50	**3.2**	**5.2**	**5.1**	**11**	**9.3**	**29**	**16**	**21**	**9.1 J***	**13**	< 10	**27**	**37**	**37**
Acenaphthylene	10	µg/L	< 1	< 1.0	**14**	< 1.0	<0.20	< 3.8	< 0.10	**0.17 J**	< 0.10	**38**	**0.21**	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	**0.062**	**0.14**	**0.16**	< 0.050	<0.20	< 3.8	< 0.10	**0.22 J**	**0.14 J**	**1.1 J**	**0.27**	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.10	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.056	< 0.057	< 0.046	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.10	< 0.1	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 3.8	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20 *	< 1.9	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**0.59**	**1.4**	**1.7**	< 0.10	**0.39**	< 3.8	**0.59**	**2**	**1.4**	**9.4**	**2.5**	**2.2**	< 20 *	1.7 J	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 0.050	< 0.05	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	**210**	**320**	< 0.50	**0.21**	**86**	**110**	**190**	**390**	**2,400**	**340**	**400**	**300**	**400**	< 10	**760**	**750 J**	**1,100**
Phenanthrene	10	µg/L	< 0.05	**0.49**	**1.1**	< 0.050	<0.20	< 3.8	**0.5**	**1.2**	**0.86 ***	**7.3**	**1.9**	**2.4**	< 20 *	1.2 J	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	**0.057**	**0.58**	< 0.050	<0.20	< 3.8	< 0.10	< 0.13	< 0.10	< 1.9	< 1.9	< 1.9	< 20	< 1.9	< 10	< 10	< 10	< 10
Inorganic Compounds																				
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.535**	**0.46**	**0.474**	**0.0436**	**0.45**	**0.49**	**0.52**	**0.46**	**0.46**	**0.79**	**0.44**	**0.47**	**0.45**	**0.47**	**0.141**	**0.421**	**0.355**	**0.353**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00028 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	**0.0257**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0015 J**	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0021 J**	**0.0027 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.011**	**0.016**	< 0.0050	**0.011**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	**0.0217**	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	<0.020	**0.02**	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-306BR (Continued)																				
			7/11/2006	1/13/2006	1/06 DUP	7/22/2005	7/05 DUP	1/20/2005	1/05 DUP	7/15/2004	7/04 DUP	1/22/2004	1/04 DUP	7/18/2003	1/17/2003	1/03 DUP	7/12/2002	4/28/2002	4/26/2002	1/22/2002	7/18/2001	7/01 DUP	1/22/2001
			Pre-Extraction																				
Volatile Organic Compounds																							
Acetone	4,000	µg/L	50 U	2,500 U	2,000 U	620 U	620 U	2,500 U	2,500 U	2,500 U	2,500 U	12,000 U	6,200 U	2,500 U	25 U	0.025 U	1,200 U	1,200 U	1,200 U	1,200 U	**1,200 R**	**120 R**	1,200 U
Benzene	5	µg/L	**7,300**	**8,900**	**7,900**	**7,700**	**7,600**	**6,800**	**7,300**	**6,700**	**7,000**	**6,500**	**6,400**	**7,400**	**4,900 D**	**4,900 D**	**4,700**	**5,800**	**5,300**	**6,200**	**7,200**	**7,500 D**	**5,400 DB**
Carbon Disulfide	4,000	µg/L	5 U	250 U	200 U	25 U	25 U	100 U	100 U	100 U	100 U	500 U	250 U	10 U	1.0 U	1.0 U	50 U	50 U	50 U	50 U	50 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	**450**	**840**	**800**	**1,100**	**1,100**	**9,900**	**1,000**	**890**	**910**	**1,100**	**1,100**	**1,200**	**880 D**	**890 D**	**1,000**	**1,100**	**980**	**1,000**	**1,600**	**1,500 D**	--
Methylene Chloride	5	µg/L	5 U	250 U	200 U	120 U	120 U	500 U	500 U	500 U	500 U	2,500 U	1,200 U	50 U	5.0 U	5.0 U	250 U	250 U	250 U	250 U	250 U	25 U	25 U
Toluene	1,000	µg/L	**5.4**	250 U	200 U	25 U	25 U	100 U	100 U	100 U	100 U	500 U	250 U	100 U	**10**	**9.9**	**42 J**	**93**	**32 J**	**26 J**	**21 J**	**26**	**14**
Trichloroethylene	5	µg/L	5 U	250 U	200 U	25 U	25 U	100 U	100 U	100 U	100 U	500 U	250 U	100 U	1.0 U	1.0 U	50 U	50 U	50 U	50 U	50 U	5.0 U	5.0 U
Xylenes, total	2,000	µg/L	**180**	500 U	400 U	**270**	**260**	**200**	**210**	**240**	**250**	1,000 U	500 U	**690**	**550 D**	**560 D**	**630**	**780**	**640**	**500**	**920**	**1,000**	**550**
Semivolatile Organic Compounds																							
2-Methylnaphthalene	*	µg/L	--	**200**	**200**	**150**	**170**	**190**	**190**	**160**	**170**	**170**	**150**	**160**	**170**	**180**	**35**	--	--	**170**	--	**190**	**160**
Acenaphthene	2,000	µg/L	**57**	**60**	**60**	**22**	**56**	100 U	100 U	**58**	**60**	**54**	**50**	**61**	**52**	**54**	**52**	--	--	**56**	--	**65**	**54**
Acenaphthylene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.78**	**0.72**	10 U	**0.91 J**	**0.95 J**	10 U	--	--	50 U	--	50 U	10 U
Anthracene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.91**	**0.87**	10 U	**0.87 J**	**0.86 J**	**0.83 J**	--	--	50 U	--	50 U	**0.54 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 UJ	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Chrysene	0.2	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 UJ	10 U
Dibenzofuran	1	µg/L	--	50 U	50 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**6.1**	**5.8**	10 U	**1.8 J**	**1.8 J**	**1.6 J**	--	--	**1.8 J**	--	**2.1 J**	**1.8 J**
Fluoranthene	1,000	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.26**	**0.24**	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Fluorene	1,000	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**9**	**8.4**	10 U	**8.3 J**	**8.8 J**	**8.2 J**	--	--	**6.2 J**	--	**8.1 J**	**6.2 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	--	50 UJ	10 U
Naphthalene	20	µg/L	**1,600**	**1,700**	**1,700**	**1,500**	**1,800**	**1,900**	**1,800**	**1,600**	**1,700**	**1,600**	**1,400**	**1,500**	**2,200 D**	**2,500 D**	10 U	**580**	**520**	**1,700 D**	**2,000 D**	**1,800 D**	--
Phenanthrene	10	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**7**	**6.6**	10 U	**6.8 J**	**6.9 J**	**5.9 J**	--	--	**5.6 J**	--	**7.0 J**	**4.3 J**
Pyrene	1,000	µg/L	10 U	10 U	10 U	8.0 U	20 U	100 U	100 U	40 U	40 U	**0.31**	**0.3**	10 U	10 U	10 U	10 U	--	--	50 U	--	50 U	10 U
Inorganic Compounds																							
Aluminum (fume or dust)	*	mg/L	--	0.2 U	0.2 U	0.2 U	**0.727**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.029 B**	--	--	**0.03 B**	0.2 U	0.2 U	**0.033 BN**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.364**	**0.352**	**0.376**	**0.284**	**0.326**	**0.34**	**0.34**	**0.33**	**0.32**	**0.31**	**0.31**	**0.3**	**0.32**	**0.32**	**0.33**	--	--	**0.26**	**0.27**	**0.28**	**0.26**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**28.3**	**31.2**	**26.2**	**30.3**	**27**	**27**	**26**	**25**	**27**	**26**	**23**	**25**	**26**	**26**	--	--	**21**	**22**	**23**	**22**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	**0.002 B**
Cobalt	*	mg/L	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0046 B**	**0.0034 B**	0.02 U	--	--	0.02 U	**0.0026 J**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.73**	**1.76**	**1.48**	**2.32**	**1.5**	**1.5**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	--	--	**1.2**	**1.1**	**1.2**	**1.1**
Lead	0.015	mg/L	0.01 U	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0015 B**	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	**16.7**	**16.3**	**13.9**	**15.7**	**15**	**14**	**14**	**14**	**14**	**14**	**13**	**14**	**14**	**14**	--	--	**11**	**12**	**12**	**12**
Manganese	*	mg/L	--	**1**	**1.03**	**0.81**	**0.937**	**0.94**	**0.94**	**0.89**	**0.89**	**0.9**	**0.88**	**0.77**	**0.86**	**0.86**	**0.88**	--	--	**0.72**	**0.74**	**0.77**	**0.71**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	--	--	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	--	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	5 U	**2.82**	**3.42**	**3.3**	**3.3**	**3.1**	**3.1**	**3.1**	**3.1**	**2.9**	**3.1**	**3.1**	**3.1**	--	--	**2.7**	**3.1**	**3.2**	**2.7**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**16.7**	**17.1**	**15.6**	**17.3**	**15**	**15**	**15**	**15**	**16**	**15**	**16**	**15**	**15**	**15**	--	--	**13**	**14**	**15**	**14**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 UWN	--	--	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	**0.0336**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.022**	**0.015 B**	0.02 U	--	--	0.02 U	0.02 U	**0.0078 J**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306TZ																		
		Sample Date	1/13/2015	1/15 DUP	7/14/2014	7/14 DUP	1/27/2014	1/14 DUP	7/9/2013	1/10/2013	1/13 DUP	7/25/2012	7/12 DUP	1/17/2012	01/12 DUP	7/11 DUP	7/6/2011	01/11 DUP	1/18/2011	7/20/2010	1/12/2010	01/10 DUP
		Unit	During Extraction																		
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	<50	< 50	< 100	< 100	< 100	< 100	< 50	< 5.0	< 25	< 50	< 5.0	< 5.0	< 100 U	< 5000	< 5000
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**18**	**18**	**21**	**5.1**	**5.4**	**5.5**	**5.3**	**91**	**81**	**120**	**120**	**710**	**630**	**69**	**4700**	**4800**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	**0.89 J**	< 3.0	< 6.0	< 0.60	< 0.60	< 5.0 U	<250	<250
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.3 J**	**1.8 J**	**2.0 J**	**2.6 J**	**2.9 J**	**2.3 J**	**1.1 J**	<250	<250
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 5.0	< 10	< 1.0	< 1.0	< 5.0 U	<250	<250
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 3.3	**0.77 J**	< 1.7	< 3.3	**0.67 J**	**0.63 J**	**0.63 J**	<250	<250
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.13	< 0.65	< 1.3	< 0.13	< 0.13	< 5.0 U	<250	<250
Xylenes, total	2,000	µg/L	**6.8**	**6.3**	**7**	**8.6**	**7.5**	**8.6**	**7.5**	**8.5**	**8.8**	7.8	7.3	**12 J**	**14**	**11 J**	**11 J**	**22**	**17**	**19**	<250	<250
Semivolatile Organic Compounds																						
Acenaphthene	2,000	µg/L	**18**	**21**	**16**	**19**	**18**	**19**	**17**	**12**	**13**	**6.3**	**7.6**	**13**	**15**	**21**	**19**	**24**	**24**	**23**	<94	30
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	**0.21**	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	<0.19	<0.19	**0.34**
Anthracene	10	µg/L	**0.25**	**0.25**	**0.3**	**0.35**	**0.37**	**0.39**	**0.27**	**0.2**	**0.24**	< 3.8	< 3.8	**0.24**	**0.30**	< 0.95	< 1.0	< 0.96	< 0.96	**0.36**	**0.48**	**0.43**
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	**0.19**	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.045	< 0.043	< 0.43	< 0.46	< 0.43	< 0.43	< 0.19	< 0.19	<0.20
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19	< 0.19	<0.20
Fluoranthene	1,000	µg/L	**0.12**	**0.13**	**0.14**	**0.16**	**0.17**	**0.18**	**0.15**	**0.25**	<0.19	< 3.8	< 3.8	**0.11 J**	**0.15 J**	< 0.95	< 1.0	< 0.96	< 0.96	**0.16 J**	**0.21**	**0.25**
Fluorene	1,000	µg/L	**2**	**2.2**	**2.1**	**2.3**	**2.5**	**2.7**	**2.1**	**1.6**	**1.7**	< 3.8	< 3.8	**1.3**	**1.6**	**3.4**	**3.0**	**3.5**	**3.2**	**2.0**	**4.3**	**3.4**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.19	<0.19	< 3.8	< 3.8	< 0.099	< 0.096	< 0.95	< 1.0	< 0.96	< 0.96	< 0.19 U	<0.20	< 0.19
Naphthalene	20	µg/L	**240**	**300**	**310**	**390**	**290**	**340**	**340**	**420**	**270**	**200**	**240**	**550 D**	**770**	**380**	**330**	**520**	**510**	**340**	**650**	**700**
Phenanthrene	10	µg/L	**0.95**	**1.1**	**1.3**	**1.5**	**1.6**	**1.8**	**1.5**	**1.4**	**1.3**	< 3.8	< 3.8	**1.5**	**1.9**	**2.3**	**2.2**	**2.5**	**2.6**	**2.0**	**3.2**	**3.1**
Pyrene	1,000	µg/L	**0.11**	**0.12**	**0.11**	**0.13**	**0.15**	**0.17**	**0.12**	**0.32**	<0.19	< 3.8	< 3.8	< 0.099	**0.11 J**	< 0.95	< 1.0	< 0.96	< 0.96	**0.16 J**	< 0.19	<0.20
Inorganic Compounds																						
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020
Barium	2	mg/L	**0.735**	**0.741**	**0.802**	**0.821**	**0.790**	**0.822**	**0.689**	**0.45**	**0.44**	**0.50**	**0.50**	**0.56**	**0.57**	**0.76**	**0.74**	**0.65**	**0.57**	**0.73**	**0.84**	**0.77**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	**0.0042 J**	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0083 J**	**0.014**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040
Selenium	0.05	mg/L	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-306TZ (Continued)																				
		Sample Date	07/09 DUP	7/21/2009	1/19/2009	07/08 DUP	7/22/2008	1/9/2008	7/10/2007	07/07 DUP	2/15/2007	7/11/2006	2/8/2006	1/12/2006	01/06 DUP	7/22/2005	1/20/2005	7/15/2004	7/18/2003	1/15/2003	7/9/2002	1/15/2002	7/11/2001	1/22/2001
		Unit	During Extraction									Pre-Extraction												
Volatile Organic Compounds																								
Acetone	4,000	µg/L	< 2000	< 5000	< 5000	< 5000	< 1000	< 50	< 50	< 50	< 50	50 U	--	2,000 U	2,000 U	620 U	1,200 U	1,200 U	630 U	120 U	120 U	120 U	120 U	120 U
Benzene	5	µg/L	**3900**	**4200**	**3500**	**3500**	**3,500**	**4,100**	**5,600**	**5,700**	**6,800**	**6,600**	--	**5,700**	**5,500**	**6,200**	**4,600**	**3,200**	**1,700**	**1,100 D**	**1,000 D**	**880**	**1,700 D**	**740 DB**
Carbon Disulfide	4,000	µg/L	< 100	< 250	64 J	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	--	200 U	200 U	25 U	50 U	50 U	25 U	5.0 U	5.0 U	5.0 U	**11**	1.0 U
Ethylbenzene	700	µg/L	< 100	< 250	< 250	< 250	**9.0 J**	**9.4**	**8.5**	**7.8**	**39**	**64**	--	200 U	200 U	**700**	**760**	**410**	**300**	**300**	**290**	**170**	**450**	**170 D**
Methylene Chloride	5	µg/L	< 100	< 250	21 J	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	100 U	840 U	880 U	120 U	250 U	250 U	130 U	25 U	25 U	25 U	**25 J**	5.0 U
Toluene	1,000	µg/L	< 100	< 250	< 250	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	--	200 U	200 U	25 U	50 U	50 U	50 U	**1.5 J**	**2.6 J**	**7.7**	**8.9**	**1.3**
Trichloroethylene	5	µg/L	< 100	< 250	< 250	< 250	< 50	< 5.0	< 5	< 5	< 5	5 U	--	200 U	200 U	25 U	50 U	50 U	50 U	5.0 U	**3.5 J**	5.0 U	**3.1 J**	1.0 U
Xylenes, total	2,000	µg/L	< 100	< 250	61 J	**55**	**84**	**100**	**95**	**85**	**160**	**130**	--	400 U	400 U	**210**	**290**	**200**	**110**	**82**	**130**	**66**	**230**	**94**
Semivolatile Organic Compounds																								
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	**68**	**62**	**80**	**85**	**69**	**43**	**0.02**	**22**	**15**	**28**	**18**
Acenaphthene	2,000	µg/L	**43**	**41**	**14 J***	**25**	**19**	**27**	**32**	**30**	**32**	**35**	--	**24**	**23**	**29**	80 U	**26**	**19**	**0.011**	**9.7 J**	**7.2 J**	**13**	**9.3 J**
Acenaphthylene	10	µg/L	**0.29**	< 0.94	< 20 *	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	**0.71**	< 0.94	< 20 *	**0.56 J**	**0.49 J**	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	**1.3 J**	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.94	< 20 *	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.1	< 0.1	< 0.1	< 0.1	0.1 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	33 U	20 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	**0.23**	< 0.94	< 20 *	< 3.8	< 3.9	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	**5.2**	4.9	< 20 *	**3.3 J**	**2.3 J**	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	**0.00095 J**	**1.2 J**	**0.85 J**	**1.3 J**	**0.98 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.94	< 20	< 3.8	< 3.9	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	**1100**	**830**	**340**	**650**	**560**	**680**	**780**	**860**	**780**	**850**	--	**710**	**670**	**910**	**820**	**660**	**490**	**0.26 D**	**210 D**	**140**	**330 D**	**180**
Phenanthrene	10	µg/L	**3.8**	**3.9**	< 20 *	**3.1 J**	**2.4 J**	< 10	< 10	< 10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	**0.0014 J**	**0.95 J**	**0.72 J**	**1.3 J**	**1.0 J**
Pyrene	1,000	µg/L	**0.22**	< 0.94	< 20	< 3.8	< 3.9	<10	<10	<10	< 10	10 U	--	6.7 U	4.0 U	10 U	80 U	80 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																								
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	**0.043 BN**	0.2 U	**0.036 BN**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.71**	**0.67**	**0.54**	**0.5**	**0.5**	**0.513**	**0.592**	**0.580**	**0.590**	**0.624**	--	**0.594**	**0.609**	**0.581**	**0.46**	**0.32**	**0.31**	**0.33**	**0.33**	**0.36**	**0.31**	**0.36**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	--	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**52.7**	**51.2**	**52.2**	**36**	**25**	**24**	**26**	**28**	**27**	**25**	**29**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.005 UJ	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.007 UJ	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 UN	**0.0012 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	**0.0062 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	--	0.01 UJ	0.01 UJ	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**3.55**	**3.56**	**2.37**	**1.5**	**0.99**	**1**	**1.2**	**1.2**	**1.3 N**	**1.1**	**1.3**
Lead	0.015	mg/L	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**29.4**	**29.8**	**27.9**	**20**	**13**	**15**	**14**	**15**	**15**	**14**	**16**
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**1.89**	**1.93**	**1.77**	**1.4**	**0.96**	**0.95**	**1.0**	**1.1**	**1.0**	**0.94 N**	**1.1**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	--	0.0002 UJ	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	5 U	5 U	**3.94**	**3.7**	**3**	**2.7**	**2.9**	**2.9**	**3.0**	**3.0**	**3.1**
Selenium	0.05	mg/L	< 0.020	< 0.020	--	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**24.8**	**24.9**	**26.2**	**23**	**24**	**21**	**23**	**18**	**17**	**23**	**19**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1	0.001 U	--	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.002 U	0.0020 UWN	0.002 UJ	0.0020 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-307BR																			
			1/15/2015	1/15 DUP	7/16/2014	1/10/2014	1/14 DUP	8/13/2013	8/13 DUP	1/9/2013	1/13 DUP	7/24/2012	07/12 DUP	1/23/2012	01/12 DUP	07/11 DUP	7/7/2011	01/11 DUP	1/13/2011	7/20/2010	07/10 DUP	1/7/2010	01/10 DUP
			During Extraction																			
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 5,000	< 5,000	< 5,000	<5,000	< 5,000	< 50	< 50	< 10,000	< 10,000	< 20,000	< 20,000	< 1,000	< 1,000	< 1000	< 1000	< 500	< 500	< 10000	< 10000	< 10000	< 10000
Benzene	5	µg/L	**12,000**	**12,000**	**15,000**	**13,000**	**13,000**	**15,000**	**15,000**	**11,000**	**13,000**	**12,000**	**12,000**	**12,000**	**12,000**	**13,000**	**13,000**	**13,000**	**13,000**	**10000**	**11000**	**10000**	**11000**
Carbon Disulfide	4,000	µg/L	< 500	< 500	< 500	<500	< 500	< 5.0	< 5.0	<500	<500	< 1,000	< 1,000	< 120	< 120	< 120	< 120	< 60	< 60	< 500	< 500	< 500	< 500
Ethylbenzene	700	µg/L	**2,000**	**2,100**	**2,400**	**2,400**	**2,300**	**2,300**	**2,400**	**1,300**	**1,500**	**2,000**	**2,100**	**1,900**	**1,900**	**1,900**	**1,900**	**2,200**	**2,200**	**2200**	**2300**	**2000**	**2000**
Methylene Chloride	5	µg/L	< 500	< 500	< 500	<500	< 500	< 5.0	< 5.0	<500	<500	< 1,000	< 1,000	< 200	< 200	< 200	< 200	< 100	< 100	< 500	< 500	< 500	< 500
Toluene	1,000	µg/L	< 500	< 500	< 500	<500	< 500	**5.8**	**5.6**	<500	<500	< 1,000	< 1,000	**120 J**	**110 J**	**110 J**	**110 J**	**51 J**	**52 J**	**150 J**	**140 J**	<500	<500
Trichloroethylene	5	µg/L	< 500	< 500	< 500	<500	< 500	< 5.0	< 5.0	<500	<500	< 1,000	< 1,000	< 26	< 26	< 26	< 26	< 13	< 13	< 500	< 500	< 500	< 500
Xylenes, total	2,000	µg/L	**720**	**770**	**1,000**	**1,200**	**1,200**	**1,000**	**1,000**	**540**	**600**	**1,100**	**1,200**	**1,300**	**1,300**	**1,300**	**1,300**	**1,800**	**1,800**	**1800**	**1800**	**1500**	**1500**
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**220**	**220**	**240**	**270**	**250**	**180**	**160**	**200**	<190	**260**	**190**	**250**	**230**	**280**	**240**	**140**	**150**	**150**	**160**	**160**	**210**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	**3**	**2.6**	**2.6**	**1.2**	**1.6**	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	**6.2 J**	< 0.96	**2.4**	< 19	< 19	< 94	< 94
Anthracene	10	µg/L	**7.2**	**6.6**	**7.7**	**8.1**	**7.7**	**6.6**	**5.2**	< 190	< 190	< 190	< 190	< 11	< 11	**9.4 J**	**8.5 J**	**6.1**	**8.1**	< 19	**5.2**	< 94	< 94
Benz(a)anthracene	0.1	µg/L	**0.20**	**0.15**	**0.19**	**0.18**	**0.18**	**0.15**	**0.11**	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	**2.1**	< 19	< 19	< 94	< 94
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Chrysene	0.2	µg/L	**0.13**	**0.11**	**0.15**	**0.13**	**0.12**	**0.11**	**0.088**	< 190	< 190	< 190	< 190	< 4.9	< 4.7	< 2.2	< 2.2	**0.75 J**	**1.6 J**	< 19	< 19	< 94	< 94
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Fluoranthene	1,000	µg/L	**3.5**	**3.1**	**3.5**	**3.6**	**3.5**	**3.3**	**2.6**	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	**5.5**	**9.6**	< 19	**2.1**	< 94	< 94
Fluorene	1,000	µg/L	**48**	**46**	**52**	**55**	**54**	**37**	**33**	< 190	< 190	< 190	< 190	**57**	**53**	**80**	**68**	**36**	**44**	**32**	**32**	< 94	< 94
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 190	< 190	< 190	< 190	< 11	< 11	< 4.8	< 4.8	< 0.96	< 0.96	< 19	< 19	< 94	< 94
Naphthalene	20	µg/L	**6,700**	**8,100**	**7,700**	**9,600**	**8,400**	**6,100**	**5,000**	**4,100**	**3,800**	**7,500**	**6,400**	**10,000 D**	**8,700 D**	**6,400**	**5,800**	**6,300**	**5,900**	**5900**	**8000**	**5200**	**6800**
Phenanthrene	10	µg/L	**46**	**44**	**55**	**57**	**53**	**37**	**32**	< 190	< 190	< 190	< 190	**57**	**52**	**56**	< 48	**40**	**52**	**31**	**31**	< 94	< 94
Pyrene	1,000	µg/L	**4.1**	**3.6**	**3.6**	**3.7**	**3.6**	**3.3**	**2.8**	< 190	< 190	< 190	< 190	< 11	< 11	**5.5 J**	< 4.8	**8.1**	**14**	< 19	< 19	< 94	< 94
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	**0.0057 J**	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020
Barium	2	mg/L	**0.804**	**0.826**	**0.862**	**0.893**	**0.888**	**0.905**	**0.954**	**0.87**	**0.80**	**0.89**	**0.87**	**0.92**	**0.96**	**0.90**	**0.88**	**0.96**	**0.96**	**0.85**	**0.84**	**0.85**	**0.88**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00029 J**	**0.00029 J**	< 0.00020	**0.00020 J**	**0.00087 J**	**0.00098 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	**0.012**	**0.019**	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	**0.0052 J**	**0.0043 J**	**0.0086 J**	**0.0068 J**	**0.020**	**0.047**	< 0.020	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	<0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	**0.011**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	--	--	< 0.010	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.0040	**0.0071 J**	**0.001 J**	< 0.0040	0.0048 J	**0.0048 J**	<0.010	<0.010	<0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	**0.0247**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.064**	**0.061**	< 0.040	< 0.040	**0.014 J**	**0.010 J**	**0.12**	**0.11**	**0.022 J**	**0.035 J**	**0.0066 J**	<0.040	<0.040	<0.040
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	**0.0024 J**	**0.0030 J**	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0746**	**0.0802**	**0.084**	**0.0897**	**0.0906**	**0.0264**	**0.117**	**0.11**	**0.11**	**0.050**	**0.057**	**0.13**	**0.079**	**0.091**	**0.083**	**4.1**	**4.6**	<0.020	<0.020	<0.020	<0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-307BR (Continued)																						
			07/09 DUP	7/23/2009	1/16/2009	07/08 DUP	7/15/2008	1/8/2008	01/08 DUP	7/9/2007	07/07 DUP	2/13/2007	10/3/2006	1/19/2006	12/7/2005	8/4/2005	7/16/2004	1/24/2004	7/18/2003	1/21/2003	7/15/2002	4/30/2002	4/26/2002	1/22/2002	7/18/2001	1/23/2001
			During Extraction										Pre-Extraction													
Volatile Organic Compounds																										
Acetone	4,000	µg/L	< 10000	< 10000	< 10000	< 500	< 500	< 50	< 50	<5,000 UJ	<5,000	< 50	50 U	1,700 U	--	25 U	1,200 U	1,200 U	250 U	250 U	2,500 U	2,500 U	1,200 U	1,200 U	**1,200 R**	1,200 U
Benzene	5	µg/L	**11000**	**11000**	**17000**	**9200**	**9800**	**11,000**	**13,000**	**10,000**	**13,000**	**9,800**	**3,800**	**5,700**	--	**380**	**3,500**	**6,700**	**4,600**	**7,900**	**10,000**	**12,000**	**11,000 D**	**11,000 D**	**6,800**	**5,100 B**
Carbon Disulfide	4,000	µg/L	< 500	< 500	< 500	< 25	< 25	< 5.0	< 5.0	< 5	< 5	< 5	5 U	170 U	--	1.0 U	50 U	50 U	10 U	100 U	100 U	100 U	50 U	50 U	50 U	50 U
Ethylbenzene	700	µg/L	**2000**	**1900**	< 500	**1600**	**1800**	**2,500**	**2,600**	**2,600**	**2,500**	**2,500**	**580**	**1,200**	--	**61**	**660**	**1,500**	**860**	**1,800**	**2,300**	**2,600**	**3,200**	**2,600**	**1,500**	**1,200**
Methylene Chloride	5	µg/L	< 500	< 500	**3000**	< 25	< 25	< 5.0	< 5.0	< 5	< 5	< 5	5 U	170 U	--	5.0 U	250 U	250 U	50 U	500 U	500 U	500 U	250 U	250 U	250 U	250 U
Toluene	1,000	µg/L	< 500	< 500	**1400**	**41**	**50**	**540**	**680**	**960**	**970**	**1,400**	**29**	170 U	--	**3.2**	50 U	50 U	**15**	**77 J**	**210**	**280**	**340**	**100**	**57**	**69**
Trichloroethylene	5	µg/L	< 500	< 500	< 500	< 25	**3.4 J**	< 5.0	< 5.0	< 5	< 5	< 5	5 U	170 U	--	1.0 U	50 U	50 U	10 U	**1,200**	100 U	100 U	50 U	50 U	50 U	50 U
Xylenes, total	2,000	µg/L	**1500**	**1500**	**2500**	**1000**	**1100**	**1,700**	**1,800**	**1,700**	**1,700**	**1,900**	**340**	**990**	--	**35**	**390**	**1,200**	**560**	**1,400**	**1,700**	**2,300**	**2,800**	**2,200**	**910**	**1,100**
Semivolatile Organic Compounds																										
2-Methylnaphthalene	*	µg/L	--	--	--	**--**	**--**	**--**	**--**	--	--	**--**	--	**550**	--	**12**	**100**	**260**	**170**	**400**	**38**	--	--	**820**	**360**	**320**
Acenaphthene	2,000	µg/L	**20**	**17**	**84**	**150**	**150**	**180 J**	**280 J**	**230**	**210**	**160**	**31**	**190**	--	**6.2**	**41**	**94**	**74**	**130**	**9.0 J**	--	--	**230**	**120**	**120**
Acenaphthylene	10	µg/L	< 3.8	< 3.8	**6.2 J**	**2.1 J**	**2.1 J**	< 10	< 10	< 10	< 10	**20**	10 U	**4.6**	--	1.0 U	40 U	**0.88**	10 U	50 U	**3.7 J**	--	--	100 U	50 U	**2.4 J**
Anthracene	10	µg/L	**3.8**	< 3.8	< 39	**6.6**	**5.5**	< 10	< 10	< 10	< 10	< 10	10 U	**5.4**	--	1.0 U	40 U	**3.3**	10 U	**2.6 J**	10 U	--	--	**4.3 J**	**2.2 J**	**3.0 J**
Benz(a)anthracene	0.1	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	**0.10**	**0.13**	**0.15**	**0.14**	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1	0.1 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Chrysene	0.2	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	**0.080**	< 0.050	**0.080**	**0.080**	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.10	< 0.10	**0.15 J**	< 0.1 UJ	< 0.1	0.1 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	**--**	--	--	--	20 U	--	1.0 U	40 U	**4.2**	10 U	**6.4 J**	10 U	--	--	**11 J**	**5.6 J**	**6.5 J**
Fluoranthene	1,000	µg/L	< 3.8	< 3.8	< 39	**2.5 J**	**2.6 J**	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	**1.2**	10 U	50 U	10 U	--	--	100 U	50 U	**1.8 J**
Fluorene	1,000	µg/L	**3.8**	< 3.8	19 J	**33**	**32**	**38**	**38**	**33**	**37**	**36**	10 U	**37**	--	1.0 U	40 U	**13**	**14**	**26 J**	10 U	--	--	**41 J**	**20 J**	**24**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 3.8	< 3.8	< 39	< 4.0	< 3.9	< 0.05	< 0.050	**0.11 J**	< 0.05 UJ	< 0.05	0.05 U	4.0 U	--	1.0 U	40 U	0.2 U	10 U	50 U	10 U	--	--	100 U	50 U	10 U
Naphthalene	20	µg/L	**590**	**420**	**2600 B**	**3400**	**3700**	**5,500 J**	**7,800 J**	**7,200**	**7,300**	**6,000**	**570**	**4,300**	--	**160**	**1,200**	**2,700**	**3,100**	**3,900 D**	**560 D**	**4,500**	**16,000 D**	**6,000 D**	**4,000 D**	**2,900 D**
Phenanthrene	10	µg/L	< 3.8	< 3.8	**23 J**	**33**	**31**	**37**	**37**	**35**	**39**	**34**	10 U	**35**	--	1.0 U	40 U	**19**	**14**	**25 J**	10 U	--	--	**44 J**	**20 J**	**26**
Pyrene	1,000	µg/L	< 3.8	< 3.8	< 39	3.4 J	3.3 J	< 10	< 10	< 10	< 10	< 10	10 U	4.0 U	--	1.0 U	40 U	**1.2**	10 U	50 U	10 U	--	--	100 U	50 U	**1.9 J**
Inorganic Compounds																										
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.2 U	--	**0.484**	**0.76**	**0.43**	**0.6**	**0.68**	**0.93**	--	--	**0.98**	**0.38**	**0.38 N**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.01 U	--	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500	< 0.05	< 0.05	< 0.05	0.05 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.89**	**0.88**	**0.86**	**0.82**	**0.8**	**0.735**	**0.838**	**0.767**	**0.767**	**0.782**	**0.971**	**0.851**	--	**0.844**	**1.7**	**1.5**	**1.8**	**1.4**	**1.1**	--	--	**0.98**	**1.6**	**1.0**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	**0.00038 J**	**0.00031 J**	**0.00031 J**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	0.01 U	0.005 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	0.005 U	0.002 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**49.2**	**57**	**60.7**	**96**	**87**	**82**	**75**	**58**	--	--	**49**	**83**	**54**
Chromium	0.1	mg/L	< 0.010	< 0.010	0.0032 J	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.0161**	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0072 B**	**0.0077 B**	--	--	**0.0073 B**	**0.0065 J**	**0.0036 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.007 U	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0028 B**	**0.0034 B**	--	--	**0.0032 B**	**0.0026 J**	**0.0028 B**
Copper	1.3	mg/L	< 0.020	< 0.020	0.0048 J	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.024**	0.025 U	--	0.02 U	0.02 U	0.02 U	0.02 U	**0.0076 B**	**0.0082 B**	--	--	**0.01 B**	**0.0034 J**	**0.0063 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	< 0.010	< 0.002	0.01 U	0.01 U	--	**0.0121**	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.013**	0.01 U	0.01 U
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**1.1**	**1.3**	**2.58**	**4.1**	**2.7**	**4.4**	**3.7**	**3.6 N**	--	--	**3.8**	**3.2**	**2.3**
Lead	0.015	mg/L	**0.024**	**0.22**	**0.0069**	< 0.0050	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.0139**	0.003 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**24.9**	--	**25.4**	**51**	**44**	**51**	**40**	**31**	--	--	**27**	**45**	**29**
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**1.33**	**1.2**	**1.63**	**2.6**	**2.1**	**2.2**	**1.8**	**1.6**	--	--	**1.3**	**2.0**	**1.3**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	**0.000086 B**	0.0002 U	--	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.16**	**1.9**	**0.025 J**	**0.0056 J**	**0.0055 J**	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	**0.0067 B**	**0.0053 B**	--	--	**0.0049 B**	**0.0048 J**	0.04 U
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	5 U	--	**7.58**	**5.1**	**4.4**	**5.4**	**4.2**	**3.8**	--	--	**3.5**	**4.9**	**3.6**
Selenium	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	**0.0039 J**	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	0.02 U	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	**0.0049 B**	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	**24.7**	--	**29.9**	**36**	**30**	**35**	**28**	**23**	--	--	**20**	**28**	**22**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1.00	< 1	0.001 U	0.001 U	--	0.001 U	0.002 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	--	--	0.002 U	0.004 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	**0.0154**	0.007 U	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0027 B**	**0.0044 B**	--	--	**0.004 B**	0.01 U	0.01 U
Zinc	2	mg/L	**1.4**	**0.75**	**0.82**	**0.043**	**0.041**	**0.253 J**	**0.0934 J**	**0.0239**	**0.0229**	**0.0374**	**0.185**	0.02 U	--	0.02 U	0.02 U	0.02 U	**0.03**	**0.029**	**0.0086 B**	--	--	**0.0085 B**	0.02 U	**0.0063 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-308BR																			
		Sample Date	1/29/2015	1/15 DUP	7/16/2014	7/14 DUP	1/10/2014	1/14 DUP	7/11/2013	1/9/2013	1/13 DUP	7/25/2012	7/12 DUP	1/20/2012	01/12 DUP	7/7/2011	7/11 DUP	1/11 DUP	1/13/2011	7/20 DUP	7/20/2010	1/7/2010	1/10 DUP
		Unit	During Extraction																			
Volatile Organic Compounds																							
Acetone	4,000	µg/L	< 2,500	< 2,500	< 2,500	< 2,500	**100**	**86**	< 50	< 5,000	<5.000	< 5,000	< 10,000	< 250	< 250	< 250	< 250	< 500	< 250	< 5000	< 5000	< 5000	< 5000
Benzene	5	µg/L	**6,600**	**6,100**	**6,400**	**6,400**	**4,500**	**4,500**	**5,700**	**5,100**	**4,100**	**5,500**	**5,600**	**5,100**	**5,300**	**5,800**	**5,400**	**7,000**	**5,500**	**5,200**	**5,400**	**3,800**	**4,100**
Carbon Disulfide	4,000	µg/L	< 250	< 250	< 250	< 250	< 5.0	<5.0	< 5.0	< 250	<250	< 250	< 500	< 30	< 30	< 30	< 30	< 60	< 30	< 250	< 250	< 250	< 250
Ethylbenzene	700	µg/L	**810**	**720**	**570**	**570**	**630**	**620**	**650**	**550**	**490**	**700**	**700**	**660**	**690**	**710**	**660**	**1,100**	**1,000**	**1,100**	**1,200**	**680**	**770**
Methylene Chloride	5	µg/L	< 250	< 250	< 250	< 250	< 5.0	<5.0	< 5.0	< 250	<250	< 250	< 500	< 50	< 50	< 50	< 50	< 100	< 50	< 250	< 250	< 250	< 250
Toluene	1,000	µg/L	**2,100**	**1,900**	**940**	**940**	**810**	**810**	**1,100**	**530**	**460**	**760**	**750**	**810**	**830**	**740**	**720**	**950**	**800**	**870**	**870**	**640**	**690**
Trichloroethylene	5	µg/L	< 250	< 250	< 250	< 250	< 5.0	<5.0	< 5.0	< 250	<250	< 250	< 500	**7.9 J**	< 6.5	< 6.5	< 6.5	< 13	< 6.5	< 250	< 250	< 250	< 250
Xylenes, total	2,000	µg/L	**880**	**740**	**590**	**590**	**680**	**660**	**840**	**700**	**620**	**710**	**700**	**710**	**710**	**600**	**550**	**920**	**950**	**820**	**870**	**670**	**740**
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**46**	**46**	**170**	**180**	**140**	**160**	**90**	**240**	**270**	**190**	**190**	**180**	**140**	**190**	**150**	**91**	**41**	**88**	**84**	**130**	**360**
Acenaphthylene	10	µg/L	**66**	**63**	< 100	**69**	**84**	**72**	**82**	**250**	<200	< 190	< 190	**79**	**63**	**150**	**130**	**69**	**21**	**36**	**37**	**340**	**700**
Anthracene	10	µg/L	**7.0**	**7.5**	**36**	**24**	**35**	**21**	**26**	< 190	<200	< 190	< 190	**32**	**31**	**49**	**37**	**28**	**17 J**	< 19	**12**	**140**	**440**
Benz(a)anthracene	0.1	µg/L	**9.6**	**9.9**	**28**	**18**	**21**	**10**	**17**	< 190	<200	< 190	< 190	**22**	**27**	**58**	**30**	**25**	**12 J**	< 19	**8.8**	**130**	**670**
Benzo(a)pyrene	0.2	µg/L	**11**	**11**	**22**	**15**	**17**	**7.1**	**14**	< 190	<200	< 190	< 190	**19**	**19**	**52**	**24**	**24**	< 10	< 19	**7.1**	**120**	**620**
Benzo(b)fluoranthene	0.2	µg/L	**10**	**10**	**22**	**14**	**12**	**5.3**	**13**	< 190	<200	< 190	< 190	**23**	**25**	**22**	< 2.2	**12 J**	< 10	< 19	**3.0**	<95	**280**
Benzo(g,h,i)perylene	10	µg/L	**5.9**	**6.2**	**11**	**6.4**	**6.2**	**2.7**	**3.9**	< 190	<200	< 190	< 190	**7.3**	**8.4 J**	**17**	**8.2**	< 9.7	< 10	< 19	**2.6**	<95	**250**
Benzo(k)fluoranthene	10	µg/L	**3.3**	**3.2**	**6.7**	**4.4**	**4.1**	**1.9**	**4.5**	< 190	<200	< 190	< 190	< 1.1	< 5.7	**29**	**22**	**13 J**	< 10	< 19	**4.7**	< 95	**330**
Chrysene	0.2	µg/L	**7.8**	**8.3**	**26**	**17**	**20**	**7.6**	**15**	< 190	<200	< 190	< 190	**20**	**22**	**46**	**24**	**23**	**12 J**	< 19	**7.9**	**130**	**550**
Dibenzo(a,h)anthracene	0.3	µg/L	**1.1**	**1.2**	**2.4**	**1.4**	**1.4**	**0.6**	**1.0**	< 190	<200	< 190	< 190	< 1.1	< 5.7	< 5.0	**3.0 J**	< 9.7	< 10	< 19	< 1.9	<95	<98
Fluoranthene	1,000	µg/L	**12**	**12**	**58**	**35**	**44**	**23**	**38**	**270**	**290**	< 190	< 190	**49**	**49**	**82**	**53**	**43**	**22**	< 19	**16**	**220**	**980**
Fluorene	1,000	µg/L	**22**	**21**	**74**	**64**	**64**	**56**	**60**	**260**	**210**	< 190	< 190	**83**	**62**	**180**	**140**	**66**	**42**	**28**	**31**	**220**	**450**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**4.8**	**4.9**	**8.9**	**5.2**	**5.2**	**2.3**	**3.7**	< 190	<200	< 190	< 190	**6.2**	**7.1 J**	**15**	**7.6**	< 9.7	< 10	< 19	**2.6**	<95	**270**
Naphthalene	20	µg/L	**3,400**	**3,200**	**5,600**	**6,100**	**5,200**	**5,100**	**3,900**	**5,200**	**4,400**	**4,400**	**4,200**	**4,400**	**4,000**	**4,600**	**4,000**	**2,900**	**1,100**	**3,700**	**2,500**	**2,400**	**4,400 B**
Phenanthrene	10	µg/L	**28**	**29**	**180**	**120**	**160**	**110**	**140**	**760**	**670**	< 190	< 190	**160**	**150**	**300**	**220**	**150**	**100**	**44**	**66**	**1,800**	**370**
Pyrene	1,000	µg/L	**17**	**19**	**71**	**43**	**57**	**29**	**44**	**400**	**430**	< 190	< 190	**62**	**60**	**150**	**85**	**69**	**29**	< 19	**27**	**1,300**	**320**
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	**0.0053 J**	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020
Barium	2	mg/L	**1.11**	**1.15**	**0.554**	**0.548**	**0.549**	**0.531**	**0.576**	**0.55**	**0.55**	**0.54**	**0.54**	**0.56**	**0.54**	**0.56**	**0.52**	**0.52**	**0.49**	**0.51**	**0.53**	**0.59**	**0.58**
Beryllium	0.004	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00020 J**	< 0.00020	**0.00022 J**	**0.00022 J**	**0.00026 J**	**0.00023 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	**0.0013 J**	**0.0014 J**	**0.0014 J**	< 0.0012	**0.0023 J**	< 0.010	< 0.010	**0.027**	**0.022**
Copper	1.3	mg/L	< 0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	**0.020**	**0.011 J**	**0.0026 J**	**0.0023 J**	< 0.0019	**0.0034 J**	< 0.010	< 0.010	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.01	< 0.001	< 0.010	< 0.010	<0.010	<0.010	--	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0090 J**	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.013**	**0.011**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	**0.071**	**0.06**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.02	< 0.02	**0.0203**	< 0.0200	< 0.0200	< 0.0200	**0.0390**	**0.92**	**0.93**	< 0.040	< 0.040	**0.53**	**0.97**	**0.0091 J**	**0.0086 J**	**0.035 J**	**0.030 J**	< 0.040	< 0.040	**0.18**	**0.18**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	**0.0066 J**	< 0.0064	< 0.0064	< 0.00020	< 0.00020	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0472**	**0.0508**	**0.0659**	**0.0339**	**0.121**	**0.122**	**0.0803**	**0.091**	**0.089**	**0.050**	**0.050**	**0.97**	**1.1**	**0.038**	**0.040**	**0.051**	**0.049**	**0.048**	**0.044**	**2.5**	**2.9**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-308BR (Continued)																									
			During Extraction															Pre-Extraction											
		7/09 DUP	7/23/2009	1/16/2009	7/08 DUP	7/17/2008	1/8/2008	1/08 DUP	7/9/2007	07/07 DUP	2/13/2007	2/07 DUP	10/3/2006	10/06 DUP	1/19/2006	12/7/2005	7/16/2004	1/24/2004	7/18/2003	7/03 DUP	1/21/2003	7/15/2002	4/28/2002	4/26/2002	1/22/2002	7/17/2001	1/23/2001	1/18/2001
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 10,000	< 5,000	< 5,000	< 10,000	< 500	< 50	< 50	<5,000 UJ	<5,000 UJ	< 50 R	< 50	50 R	50 UR	1,000 U	--	1,200 U	1,200 U	250 U	250 U	500 U	500 U	250 U	250 U	250 U	250 U	25 U	25 U
Benzene	5	µg/L	**6,600**	**7,000**	**8,700**	**6,300**	**6,500**	**9,600**	**7,300**	**9,000**	**8,700**	**5,300**	**5,700**	**1,000**	**810**	**2,600**	--	**3,000**	**3,000**	**2,500**	**2,600**	**3,000**	**1,900**	**2,900 D**	**2,600 D**	**1,700**	**1,300**	**0.25 JB**	**960 D**
Carbon Disulfide	4,000	µg/L	< 500	< 250	< 250	< 500	< 25	< 5.0	< 5.0	< 5	< 5	< 5	< 5	5 U	5 U	100 U	--	50 U	50 U	10 U	10 U	20 U	20 U	10 U	10 U	10 U	10 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	**1,200**	**1,300**	**1,900**	**1,700**	**1,700**	**1,600**	**1,400**	**1,600**	**1,600**	**1,300**	**1,400**	**510**	**460**	**360**	--	**390**	**350**	**360**	**350**	**390**	**270**	**420**	**400**	**200**	**160**	1.0 U	**140**
Methylene Chloride	5	µg/L	< 500	< 250	< 500	< 500	< 25	< 5.0	< 5.0	< 5	< 5	< 5 UJ	< 5	5 U	5 U	100 U	--	250 U	250 U	50 U	50 U	100 U	**11 J**	50 U	50 U	50 U	50 U	5.0 U	5.0 U
Toluene	1,000	µg/L	**700**	**750**	**1,800**	**730**	**580**	**650**	**530**	**930**	**880**	**1,000**	**1,100**	**98**	**92**	**450**	--	50 U	50 U	**34**	**37**	**110**	**110**	**340**	**220**	**9.2 J**	**20**	1.0 U	**13**
Trichloroethylene	5	µg/L	< 500	< 250	< 250	< 500	< 25	< 5.0	< 5.0	< 5	< 5	< 5	< 5	5 U	5 U	100 U	--	50 U	50 U	10 U	10 U	20 U	20 U	10 U	10 U	10 U	**5.0 J**	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	**730**	**740**	**1900**	**1300**	**1000**	**940**	**760**	**760**	**710**	**750**	**830**	**200**	**190**	200 U	--	**240**	**280**	**250**	**250**	**240**	**190**	**330**	**290**	**140**	**160**	2.0 U	**120**
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**100**	--	**63**	**74**	**54**	**54**	**61**	**170 DJ**	--	--	**46 J**	**34 J**	10 U	**23**
Acenaphthene	2,000	µg/L	**310**	**840**	**260**	**310**	**260**	**140**	**150**	**120**	**110**	**70**	**82**	**28**	**28**	10 U	--	**11**	**7.6**	**10**	**10**	**12**	**51**	--	--	**12 J**	**5.5 J**	10 U	**4.2 J**
Acenaphthylene	10	µg/L	**240**	**760**	**940**	**330**	**290**	**17**	**20**	**27**	**26**	**26**	**30**	**19**	**16**	10 U	--	10 U	**1.6**	10 U	10 U	**3.7 J**	**2.1 J**	--	--	50 U	50 U	10 U	**0.54 J**
Anthracene	10	µg/L	**160**	**620**	**350**	**190**	**170**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	**0.7 J**	--	--	50 U	50 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	**280**	**1,000**	**380**	**250**	**200**	**0.48**	**0.59**	**1.4**	**1.2**	**0.06**	**0.09**	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	**230**	**870**	**390**	**200**	**170**	**0.28**	**0.35**	**0.88**	**0.75**	< 0.05	< 0.05	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	**180**	**660**	**310**	**170**	**160**	**0.20**	**0.26**	**0.85**	**0.75**	< 0.1	< 0.1	0.1 U	0.1 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	**90**	**340**	**130**	**85**	**64**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	**140**	**480**	**270**	**52**	**46**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Chrysene	0.2	µg/L	**220**	**890**	**330**	**220**	**180**	**0.40**	**0.47**	**0.87**	**0.66**	< 0.05 UJ	**0.06**	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	**29**	**120**	**31 J**	**25**	**18**	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1	< 0.1	0.1 U	0.1 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	**1.1 J**
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	10 U	--	10 U	**0.37**	10 U	10 U	**0.56 J**	**2.7 J**	--	--	50 U	50 U	10 U	10 U
Fluoranthene	1,000	µg/L	**390**	**1,400**	**600**	**490**	**390**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	**0.38 J**	--	--	50 U	50 U	10 U	10 U
Fluorene	1,000	µg/L	**250**	**920**	**730**	**580**	**400**	**31**	**34**	**27**	**25**	**15**	**19**	10 U	10 U	10 U	--	10 U	**1.5**	10 U	10 U	**2.4 J**	**12**	--	--	50 U	50 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**86**	**320**	**140**	**90**	**61**	**0.080**	**0.10**	**0.33**	**0.31**	< 0.05	< 0.05	0.05 U	0.05 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Naphthalene	20	µg/L	**5,600**	**9,200**	**8,900 BD**	**8,800**	**8,400**	**4,600**	**4,700**	**5,800**	**5,300**	**2,200**	**2,600**	**1,100**	**860**	**1,100**	--	**840**	**1,200**	**680**	**730**	**850 D**	**1,900 D**	**1,600**	**1,300**	**660**	**480**	10 U	**250**
Phenanthrene	10	µg/L	**820**	**2,600**	**1,600**	**900**	**750**	**36**	**39**	**35**	**31**	**16**	**19**	10 U	10 U	10 U	--	10 U	**0.84**	10 U	10 U	10 U	**11**	--	--	50 U	50 U	10 U	10 U
Pyrene	1,000	µg/L	**610**	**2,200**	**870**	**590**	**480**	< 10	< 10	< 10	< 10	< 10	< 10	10 U	10 U	10 U	--	10 U	0.2 U	10 U	10 U	10 U	10 U	--	--	50 U	50 U	10 U	10 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--		0.2 U	--	0.2 U	**0.89**	0.2 U	0.2 U	0.2 U	**1.6**	--	--	**1.2**	**0.7 N**	**1.5 N**	**4.8**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.01 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500	< 0.05	< 0.05	< 0.05	< 0.05	0.05 U	0.05 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	**0.0037 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.54**	**0.55**	**0.6**	**0.82**	**0.62**	**0.540**	**0.501**	**0.556**	**0.557**	**0.603**	**0.608**	**0.797**	**0.785**	**0.516**	--	**0.44**	**0.44**	**0.41**	**0.4**	**0.43**	**0.48**	--	--	**0.4**	**0.35**	**0.41**	**0.4**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	**0.00035 J**	**0.0046**	**0.0013 J**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.005 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	0.005 U	0.005 U	0.002 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**36.4**	**38**	**24**	**25**	**21**	**21**	**23**	**26**	--	--	**21**	**19**	**28**	**21**
Chromium	0.1	mg/L	< 0.010	< 0.010	0.0020 J	**0.043**	**0.017**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0112**	**0.0115**	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.018**	--	--	**0.0092 B**	**0.0019 B**	**0.0042 B**	**0.0097 B**
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0072**	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0038 B**	**0.0061 B**	--	--	**0.0042 B**	**0.0036 B**	**0.013**	**0.0073 B**
Copper	1.3	mg/L	< 0.020	< 0.020	0.0097 J	**0.11**	**0.061**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0436**	**0.0425**	0.025 U	--	0.02 U	0.02 U	0.02 U	0.02 U	**0.0019 B**	**0.0077 B**	--	--	**0.0054 B**	**0.0023 B**	**0.014 B**	**0.041**
Cyanide	0.2	mg/L	< 0.010	**0.012**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.015**	**0.013**	< 0.002	< 0.002	0.01 U	0.01 U	0.01 U	--	**0.03**	**0.022**	0.015 U	0.015 U	**0.015**	**0.13**	**0.029**	**0.035**	**0.011**	**0.014**	0.01 U	**0.0056 B**
Iron	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.37**	**1.3**	**3.9**	**5.8**	**3.3**	**3.4**	**3.4**	**6.8 N**	--	--	**5.1**	**4.1**	**3.5**	**11**
Lead	0.015	mg/L	< 0.010	< 0.010	**0.014**	**0.043**	**0.036**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.003 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**17.1**	--	**12**	**13**	**13**	**12**	**13**	**14**	--	--	**12**	**10**	**12**	**13**
Manganese	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.18**	**0.96**	**0.68**	**0.82**	**0.59**	**0.59**	**0.59**	**0.75**	--	--	**0.58**	**0.55**	**0.38**	**0.71**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 UJ	0.0002 UJ	**0.00012 B**	0.0002 U	--	--	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	**0.086**	**0.090**	**0.077**	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.014 B**	--	--	0.04 U	0.04 U	0.04 U	**0.011 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.07**	--	**3.3**	**3.3**	**2.8**	**2.8**	**3.2**	**3.9**	--	--	**3.3**	**3.1**	**3.7**	**4.9**
Selenium	0.05	mg/L	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	0.02 U	0.02 U	0.005 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0053 B**	--	--	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**15.8**	--	**15**	**16**	**14**	**14**	**15**	**15**	--	--	**14**	**13**	**13**	**13**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	**0.00074**	< 0.0010	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	0.001 U	0.001 U	0.001 U	--	0.002 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UWN	--	--	0.002 U	0.002 UWN	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	0.0035 J	**0.077**	**0.022**	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	**0.0202**	**0.0208**	0.007 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0069 B**	--	--	**0.005 B**	**0.0026 B**	**0.0037 B**	**0.018**
Zinc	2	mg/L	**0.088**	**0.099**	**0.62**	**1.4**	**1.1**	**0.118 J**	**0.790 J**	**0.124**	**0.0960**	**0.0619**	**0.0599**	**0.0513**	**0.0641**	0.02 U	--	0.02 U	0.02 U	**0.04**	**0.06**	**0.022**	**0.01 B**	--	--	**0.0079 B**	**0.0073 B**	0.02 U	**0.025**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309BR																	
		Sample Date	1/29/2015	7/17/2014	1/9/2014	7/9/2013	1/9/2013	7/23/2012	1/17/2012	7/6/2011	1/17/2011	7/14/2010	1/5/2010	7/21/2009	1/21/2009	7/17/2008	1/8/2008	8/21/2007**	7/12/2007	2/14/2007
		Unit	During Extraction																	
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	<100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	**69**	--	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.60 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**0.17 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	0.38 J	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5
Semivolatile Organic Compounds																				
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Anthracene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	--	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.048	< 0.049	< 0.043	< 0.046	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	--	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	--	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	< 0.11	< 0.11	< 0.096	**0.65**	**0.13 J**	< 0.19	< 0.19	**0.067 J**	**0.052 J**	< 10	--	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	**0.055**	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.11	< 0.11	< 0.096	< 0.10	< 0.19	< 0.19	< 0.19	< 0.20	< 0.19	< 10	--	< 10	< 10
Inorganic Compounds																				
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.05	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	--	< 0.05	< 0.05
Barium	2	mg/L	**0.143**	**0.0398**	**0.245**	**0.148**	**0.20**	**0.47**	**0.20**	**0.39**	**0.46**	**0.092**	**0.069**	**0.22**	**0.22**	**0.22**	**0.221**	--	**0.230**	**0.249**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	**0.0086**	< 0.0050	**0.0113**	**0.0056**	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.010
Copper	1.3	mg/L	**0.0348**	**0.0481**	**0.0105**	**0.0759**	**0.030**	< 0.0019	**0.028**	**0.0052 J**	< 0.0019	**0.0024 J**	< 0.020	< 0.020	**0.0073 J**	**0.0031 J**	< 0.0100	--	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.000092**	< 0.00020	--	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	--	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	--	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	**0.0035 J**	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0049 J**	**0.0045 J**	< 0.0100	--	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	**0.021**	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-309BR (Continued)												
			7/12/2006	1/12/2006	7/21/2005	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/17/2003	7/11/2002	1/17/2002	1/17/2002	7/12/2001	1/23/2001
			Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	**15 J**	**25 R**	**25 R**	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.38**	**0.13 B**	**0.13 B**	**15**	**2.4 N**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0044 U	0.0036 U	0.01 U	0.01 U
Barium	2	mg/L	**0.22**	**0.381**	**0.375**	**0.38**	**0.38**	**0.38**	**0.33**	**0.39**	**0.38**	**0.39**	**0.39**	**0.53**	**0.4**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00073 U	0.00068 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**26.4**	**24.4**	**26**	**25**	**28**	**25**	**27**	**25**	**26**	**27**	**40**	**27**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0032 B**	0.01 U	0.002 U	**0.18 N**	**0.0063 B**
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0025 B**	**0.006 B**	**0.0028 B**	**0.0036 B**	**0.14**	**0.021**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.002 B**	**0.0062 B**	0.0015 U	0.0019 U	**0.21 N**	**0.027**
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.42**	**1.2**	**1.5**	**1.2**	**1.3**	**1.3**	**1.3**	**1.8**	**1.6**	**1.6**	**28**	**5.0**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	**0.003 B**	0.005 U
Magnesium	*	mg/L	< 0.0002	--	**12.1**	**9.83**	**11**	**10**	**11**	**10**	**12**	**10**	**11**	**11**	**23**
Manganese	*	mg/L	< 0.02	--	**0.355**	**0.321**	**0.36**	**0.34**	**0.35**	**0.35**	**0.32**	**0.33**	**0.37 J**	**0.37 J**	**0.78 N**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000077 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	**0.1**	0.04 U
Potassium	*	mg/L	--	5 U	**2.98**	**3.6**	**3.5**	**3.6**	**3**	**3.5**	**3.7**	**3.6 J**	**3.6 J**	**5.3**	**3.6**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**13.1**	**12.3**	**12**	**12**	**13**	**13**	**13**	**13**	**12**	**12**	**14**	**13**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UN	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.046**	**0.0072 B**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.051**	0.02 U	0.02 U	0.02 U	**0.054**	**0.0086 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
** - Resampled in August 2007 for VOCs only
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-309TZ																	
		Sample Date	7/21/2009	1/20/2009	07/23/2008	1/9/2008	7/12/2007	2/14/2007	7/12/2006	1/11/2006	7/21/2005	1/20/2005	7/14/2004	1/20/2004	7/16/2003	1/15/2003	7/10/2002	1/16/2002	7/12/2001	1/24/2001
		Unit	During Extraction						Pre-Extraction											
Volatile Organic Compounds																				
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**72**	**65**	**17 J**
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	**1.6**	**12**	**28**	**49**	**20**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.31 J**	5.0 U	5.0 U	**0.42 J**
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	**2.3**	1.0 U	**1.2**	**1.0**	1.0 U	**0.61 J**	**0.65 J**	**0.33 J**	**0.64 J**	**3.4**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.37 J**	**0.55 J**
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	µg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	**0.4 J**
Benzo(a)pyrene	0.2	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.20	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.20	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	**--**	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.20	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.20	**0.036 J**	**0.10 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.20	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	--	--	**--**	--	--	--	--	**0.306**	**0.358**	**0.48**	**0.39**	**0.51**	**0.7**	**0.85**	**2.9**	**29**	**4.7**	**22**
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0039 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.48**	**0.38**	**0.53**	**0.511**	**0.460**	**0.406**	**0.336**	**0.248**	**0.245**	**0.22**	**0.17**	**0.17**	**0.12**	**0.15**	**0.069**	**0.29**	**0.068**	**0.25**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	**0.0015 B**	0.004 U	**0.0013 B**
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.00092 B**	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**23.5**	**37.2**	**26**	**25**	**31**	**24**	**46**	**41**	**71**	**82**	**120**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U	**0.034**	**0.0023 B**	**0.022**
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0016 B**	**0.043**	**0.0027 B**	**0.029**
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	**0.0027 B**	**0.082**	**0.0076 B**	**0.053**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U	--
Iron	*	mg/L	--	--	--	--	--	--	--	**1.14**	0.1 U	**0.08**	**0.29**	**0.29**	**1.2**	**0.23**	**2**	**56**	**2.7**	**41**
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	**0.015**	0.005 U	**0.01**
Magnesium	*	mg/L	--	--	--	--	--	--	--	**5.43**	**2.5**	**4.2**	**2.1**	**2.4**	**1.7**	**0.17 B**	**0.47 B**	**12**	**0.52**	**8.9**
Manganese	*	mg/L	--	--	--	--	--	--	--	**0.126**	0.01 U	**0.089**	**0.01**	**0.015**	0.04 U	**0.0037 B**	**0.027**	**0.59**	**0.027**	**0.47**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	**0.035 B**	0.04 U	**0.024 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	**5.58**	**5.66**	**5.6**	**5.8**	**5.8**	**6.2**	**7.0**	**5.6**	**13**	**9.1**	**15**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0046 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**30.7**	**31.9**	**31**	**26**	**25**	**27**	**23**	**12**	**15**	**16**	**21**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0051 B**	**0.095**	**0.011**	**0.068**
Zinc	2	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	**0.027**	0.02 U	0.02 U	0.02 U	**0.02**	0.020 U	**0.011 B**	**0.13**	**0.0077 B**	**0.11**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-310BR															
		Sample Date	1/12/2015	7/15/2014	1/7/2014	7/9/2013	1/8/2013	7/24/2012	1/17/2012	7/5/2011	1/18/2011	7/15/2010	1/7/2010	7/27/2009	1/13/2009	7/22/2008	1/8/2008	7/12/2007	2/15/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**1.1**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.20**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.35**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.54**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.37**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.44**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.047	< 0.056	< 0.043	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.11 J**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.4**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**7.6**	< 0.50	< 0.50	< 0.50	< 0.22	**0.25**	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.22	< 0.19	< 0.10	< 0.12	< 0.097	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.142**	**0.192**	**0.261**	**0.209**	**0.23**	**0.20**	**0.21**	**0.21**	**0.22**	**0.53**	**0.27**	**0.19**	**0.13**	**0.21**	**0.228**	**0.221**	**0.243**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0026 J**	< 0.0019	**0.0020 J**	< 0.020	< 0.020	< 0.020	**0.033**	**0.0068 J**	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.016**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0030 J**	**0.0045 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.027 J**	**0.0043 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	**0.010 J**	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-310BR (Continued)												
		Sample Date	7/11/2006	1/13/2006	7/20/2005	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/21/2003	7/16/2002	7/02 DUP	1/21/2002	1/18/2001	7/17/2001
		Unit	Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.0**	**2.4**	1.0 U	1.0 U	**0.23 J**
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.6**	**1.5**	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.34 J**	1.0 U	1.0 U	**0.33 J**
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.7 J**	**0.7 J**	2.0 U	2.0 U	**1.2 J**
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.58 J**	**0.78 J**	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	**0.45**	**0.48**	10 U	10 U	**0.56 J**	**0.59 J**	**0.5 J**	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**5.1 J**	**6.3 J**	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.044 B**	**0.085 B**	**8.3**	**0.11 B**	**0.095 BN**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.13**	**0.206**	**0.205**	**0.2**	**0.19**	**0.18**	**0.17**	**0.22**	**0.19**	**0.19**	**0.26**	**0.18**	**0.18**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**10.8**	**12.2**	**11**	**9.8**	**10**	**8.6**	**15**	**10**	**10**	**16**	**10**	**9.9**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	**0.0089 B**	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0016 B**	**0.002 B**	**0.0075 B**	0.01 U	0.01 U
Copper	1.3	mg/L	**0.0353**	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.012 B**	**0.0051 B**	**0.007 B**	**0.05**	**0.0014 B**	**0.0026 B**
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**5.78**	**6.25**	**5.4**	**4.9**	**5.2**	**4.4**	**5.8**	**5**	**5.1**	**18**	**5.2**	**5.1**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0019 B**	0.005 U	0.005 U
Magnesium	*	mg/L	< 0.0002	--	**6.16**	**6.69**	**5.8**	**5.3**	**5.5**	**5**	**6.4**	**5.4**	**5.5**	**9**	**5.5**
Manganese	*	mg/L	< 0.02	--	**0.798**	**0.821**	**0.77**	**0.72**	**0.73**	**0.64**	**0.81**	**0.71**	**0.72**	**1.1**	**0.7**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U
Nickel	0.1	mg/L	**0.0397**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0069 B**	**0.0063 B**	**0.006 B**	**0.017 B**	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	**2.93**	**2.8**	**2.6**	**2.6**	**1.8**	**2.9**	**2.6**	**2.6**	**3.7**	**2.7**	**2.6**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.005 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**14.3**	**16.7**	**13**	**13**	**13**	**12**	**13**	**12**	**12**	**13**	**12**	**12**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UW	0.002 UW	0.002 U	0.002 UW	0.002 UWN
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.051**	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.02**	0.02 U	0.02 U	**0.024**	**0.0077 B**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-310TZ																
		Sample Date	7/21/2009	1/14/2009	07/22/2008	1/9/2008	7/10/2007	2/15/2007	7/11/2006	1/14/2006	1/20/2005	7/20/2005	7/05 DUP	1/20/2005	7/15/2004	1/22/2004	7/16/2003	1/16/2003	7/10/2002
		Unit	During Extraction						Pre-Extraction										
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.1 J**	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**	1.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.19	**0.038 J**	**0.030 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	**0.23**	**0.24**	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.3 J**
Acenaphthylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	**0.18**	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	**0.15**	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	**0.060**	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.19	< 0.19	< 0.10	**0.38**	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.19	< 0.19	< 0.050	**0.32**	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	**--**	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.14 B**	0.2 U
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.02 U	0.006 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U
Barium	2	mg/L	**0.13**	**0.1**	**0.11**	**0.107**	**0.128**	**0.175**	**0.244**	**0.231**	**0.23**	**0.211**	**0.214**	**0.22**	**0.17**	**0.13**	**0.14**	**0.15**	**0.15**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.00075 B**
Calcium metal	*	mg/L	--	--	**--**	--	--	--	--	**20.1**	**22**	**20.4**	**20.8**	**21**	**24**	**25**	**34**	**21**	**17**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.010 U	0.01 U
Cobalt	*	mg/L	--	--	**--**	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U
Copper	1.3	mg/L	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	**0.017**	< 0.010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U
Iron	*	mg/L	--	--	**--**	--	--	--	--	**4.8**	**2.9**	**4.15**	**4.23**	**2.9**	**0.24**	**0.22**	**0.05**	**0.68**	**0.95**
Lead	0.015	mg/L	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U
Magnesium	*	mg/L	--	--	**--**	--	--	--	--	**6.37**	**4.8**	**5.98**	**6.1**	**4.6**	**1.5**	**1.1**	**0.49**	**1.7**	**1.8**
Manganese	*	mg/L	--	--	**--**	--	--	--	--	**0.748**	**0.62**	**0.705**	**0.717**	**0.61**	**0.083**	**0.063**	0.04 U	**0.14**	**0.18**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U
Potassium	*	mg/L	**--**	**--**	**--**	--	--	--	--	5 U	**3.3**	**2.94**	**3.11**	**3.2**	**3.7**	**3.6**	**3.8**	**3.2**	**3.1**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0061 B**
Sodium	*	mg/L	--	--	**--**	--	--	--	--	**14.6**	**15**	**15.3**	**15.4**	**15**	**19**	**19**	**19**	**23**	**23**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U
Zinc	2	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	0.020 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-313															
		Sample Date	1/13/2015	7/17/2014	1/9/2014	7/9/2013	1/8/2013	7/25/2012	1/17/2012	7/5/2011	1/17/2011	7/14/2010	1/5/2010	7/22/2009	1/14/2009	7/21/2008	1/8/2008	7/12/2007	2/13/2007
		Unit	During Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	**8.7 J**	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	**0.35 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.044	< 0.050	< 0.045	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.20	**2.3**	**0.89**	**0.52**	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	**0.055**	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	--	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.098	< 0.11	< 0.10	< 0.23	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.141**	**0.197**	**0.151**	**0.145**	**0.18**	**0.14**	**0.12**	**0.14**	**0.10**	**0.23**	**0.12**	**0.14**	**0.14**	**0.38**	**0.202**	**0.203**	**0.212**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.00055 J**	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0027 J**	**0.0027 J**	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0038 J**	**0.0023 J**	< 0.020	< 0.020	**0.0056 J**	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.014**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.002	< 0.002
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	**0.0047 J**	< 0.010	< 0.010	**0.0028 J**	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	--	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0053 J**	**0.0048 J**	**0.0060 J**	**0.0030 J**	< 0.010	< 0.010	**0.0022 J**	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0564**	< 0.0200	**0.0501**	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.036**	**0.035**	**0.027**	< 0.020	**0.034**	< 0.020	< 0.0200	< 0.02	**0.0672**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-313 (Continued)											
		Sample Date	7/12/2006	1/12/2006	7/19/2005	1/19/2005	7/14/2004	1/21/2004	7/16/2003	1/20/2003	7/15/2002	1/17/2002	7/16/2001	1/19/2001
		Unit	Pre-Extraction											
Volatile Organic Compounds														
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.68 J**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	--	**0.571**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.033 B**	**0.045 B**	**0.032 B**	**0.042 B**	**0.043 B**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	**0.0054 B**	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.23**	**0.218**	**0.162**	**0.22**	**0.23**	**0.21**	**0.19**	**0.22**	**0.23**	**0.2**	**0.22**	**0.24**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**34.8**	**27**	**31**	**32**	**33**	**32**	**31**	**32**	**32**	**31**	**33**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	**0.0245**	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0021 B**	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**0.606**	**0.436**	**0.56**	**0.59**	**0.6**	**0.54**	**0.67**	**0.63 N**	**0.69**	**0.64**	**0.81 N**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	**14.1**	**10.5**	**13**	**13**	**13**	**12**	**13**	**13**	**12**	**13**	**14**
Manganese	*	mg/L	--	**0.399**	**0.288**	**0.39**	**0.4**	**0.39**	**0.38**	**0.38**	**0.39**	**0.37**	**0.39**	**0.44**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000072 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	**2.77**	**3.3**	**3.4**	**3.2**	**2.8**	**3**	**3.2**	**2.9**	**3.1**	**3.2**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0068 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**14.2**	**12.7**	**13**	**14**	**13**	**14**	**14**	**13**	**13**	**13**	**14**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.022**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 RR Reduction	Location ID / Sample Date / Unit	MW-315 During Extraction																											
			1/13/2015	1/15 DUP	7/14/2014	7/14 DUP	1/9/2014	1/14 DUP	7/11/2013	1/8/2013	1/13 DUP	7/25/2012	7/12 DUP	1/18/2012	01/12 DUP	7/7/2011	1/11 DUP	1/19/2011	7/10 DUP	7/15/2010	1/6/2010	1/10 DUP	7/29/2009	1/15/2009	7/08 DUP	7/17/2008	1/10/2008	7/12/2007	07/07 DUP	2/15/2007
Volatile Organic Compounds																														
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 100	< 100	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.29 J**	**0.29 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	**1.9 J**	**1.9 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	**1.6 J**	**1.6 J**	**0.15 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	**0.95 J**	**0.90 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	**0.24 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	< 5
Semivolatile Organic Compounds																														
Acenaphthene	2,000	µg/L	**0.56**	**0.65**	**1.5**	**1.5**	**1.0**	**0.96**	**1.1**	< 1.9	**1.9**	**0.73**	**0.77**	**1.5**	**1.7**	< 0.11	**1.1**	**0.99**	**1.2**	**1.1**	**1.8**	**1.6**	**2.9 ***	**1.8**	**2**	**2**	< 10	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.9	**0.56**	**0.24**	< 0.21	< 0.21	**0.52**	< 0.11	< 0.098	< 0.097	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	**0.020 J**	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 1.9	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	< 0.097	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	**0.043 J**	**0.033 J**	**0.04 J**	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.16**	< 0.050	**0.22**	**6.0**	<0.20	< 0.21	< 0.21	**0.51**	< 0.11	< 0.11	< 0.098	**0.33**	< 0.20	**0.20**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.18**	< 0.050	**0.53**	**15**	<0.20	< 0.21	< 0.21	**0.76**	< 0.11	< 0.11	< 0.098	**0.77**	< 0.20	**0.35**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**0.14**	< 0.10	**0.97**	**25**	<0.20	**0.29**	**0.25**	**1.9**	< 0.11	< 0.11	< 0.098	**1.1**	< 0.20	**0.54**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**0.15**	< 0.10	**0.66**	**16**	<0.20	< 0.21	< 0.21	**1.2**	< 0.11	< 0.11	< 0.098	**0.88**	< 0.20	**0.37**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.15**	< 0.050	**0.35**	**8.7**	<0.20	< 0.21	< 0.21	**1.7**	< 0.11	< 0.11	< 0.098	**0.91**	< 0.20	**0.44**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.15**	< 0.050	**0.47**	**15**	<0.20	< 0.21	< 0.21	**0.84**	< 0.048	**0.066 J**	< 0.044	**0.69**	< 0.20	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	**0.16**	< 0.10	< 0.10	**3.8**	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	< 0.097	< 0.20	**0.11 J**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	<0.10	< 0.10	**0.54**	**14**	<0.20	< 0.21	< 0.21	**0.82**	< 0.11	< 0.11	< 0.098	**0.78**	< 0.20	**0.40**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 1.9	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	< 0.097	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.16**	< 0.050	**0.51**	**15**	<0.20	< 0.21	< 0.21	**1.0**	< 0.11	< 0.11	< 0.098	**0.57**	< 0.20	**0.39**	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	**0.61**	< 0.50	**2.9**	< 1.9	<0.20	< 0.21	< 0.21	**0.41**	**2.5**	**0.62**	**0.87**	**0.98**	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.05	< 0.050	< 0.050	<0.050	< 0.050	**0.094**	< 1.9	<0.20	< 0.21	< 0.21	< 0.11	< 0.11	< 0.11	< 0.098	**0.11 J**	< 0.20	< 0.20	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	< 0.05	< 0.050	**0.051**	**0.091**	< 0.050	**0.41**	**9.0**	<0.20	< 0.21	< 0.21	**0.69**	< 0.11	< 0.11	< 0.098	**0.66**	< 0.20	**0.39**	< 0.19	< 0.19	< 0.19	**0.024 J**	**0.027 J**	**0.028 J**	< 10	< 10	< 10	< 10
Inorganic Compounds																														
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.455**	**0.459**	**0.399**	**0.413**	**0.473**	**0.48**	**0.487**	**0.49**	**0.48**	**0.52**	**0.53**	**0.53**	**0.54**	**0.020**	**0.54**	**0.52**	**0.54**	**0.53**	**0.48**	**0.51**	**0.5**	**0.57**	**0.51**	**0.5**	**0.507**	**0.481**	**0.479**	**0.463**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.00037 J**	**0.00036 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	**0.0012 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0026 JB**	**0.0032 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.000094 J**	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	<0.020	**0.024**	< 0.020	< 0.0087	< 0.0087	**0.057**	**0.0091 J**	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction	Location ID	MW-315 (Continued)												
		Sample Date	7/13/2006	7/06 DUP	1/13/2006	7/20/2005	1/18/2005	7/15/2004	1/22/2004	7/18/2003	1/21/2003	7/12/2002	1/21/2002	7/16/2001	1/24/2001
		Unit	Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 R	50 R	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.11 J**	**0.19 J**
Carbon Disulfide	4,000	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U	1.0 U	1.0 U	**0.19 J**
Methylene Chloride	5	µg/L	5 U	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	5 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.5**	**2.0**	**2.3**	**1.5 J**	**2.1 J**	**3.2**	**2.8**
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	--	**7.5**	**6.7**	**5.5**	**22**	**26**	**12**	**16**	**6.5 J**	**12**	**21**	**35**
Acenaphthene	2,000	µg/L	**12**	**15**	**32**	**28**	**39**	**61**	**49**	**33**	**50**	**49**	**45**	**54**	**53**
Acenaphthylene	10	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	10 U	**0.55**	**0.61**	0.8 U	2.0 U	**1.2**	10 U	**1.0 J**	**0.86 J**	**0.76 J**	**1.3 J**	**0.97 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.1 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.1 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	0.001 U	0.2 U	0.8 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	10 U	**0.27**	**0.33**	0.8 U	2.0 U	0.2 U	10 U	**1.1 J**	**0.93 J**	**0.48 J**	**1.4 J**	**0.86 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.05 U	0.2 U	0.2 U	0.8 U	2.0 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	10 U	0.2 U	0.2 U	0.8 U	2.0 U	**1.1**	10 U	10 U	10 U	10 U	10 U	**0.81 J**
Phenanthrene	10	µg/L	10 U	10 U	**1.6**	**1.5**	**1.3**	**4.5**	**4.7**	10 U	**4.0 J**	**2.4 J**	**3.5 J**	**6.4 J**	**6.5 J**
Pyrene	1,000	µg/L	10 U	10 U	**0.36**	**0.25**	0.8 U	2.0 U	**0.5**	10 U	10 U	10 U	10 U	10 U	**0.54 J**
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.046 B**	**0.061 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.404**	**0.395**	**0.306**	**0.282**	**0.3**	**0.3**	**0.29**	**0.27**	**0.3**	**0.3**	**0.29**	**0.29**	**0.29**
Beryllium	0.004	mg/L	0.01 U	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**37.7**	**39.9**	**37**	**37**	**39**	**34**	**38**	**37**	**38**	**37**	**36**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.002 B**	0.02 U	**0.0013 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	**5.37**	**5.45**	**5.1**	**5.1**	**5.6**	**4.4**	**5.3**	**5.2**	**5.4**	**5.3**	**5.0**
Lead	0.015	mg/L	0.01 U	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	**16.2**	**16.5**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**15**
Manganese	*	mg/L	--	--	**1.13**	**1.08**	**1.1**	**1.1**	**1.1**	**1**	**1.1**	**1.1**	**1**	**1.1**	**1.0**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	5 U	**4.2**	**4.4**	**4.3**	**4.3**	**3.6**	**4.2**	**4.2**	**4.1**	**4.1**	**4.1**
Selenium	0.05	mg/L	0.02 U	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**18.8**	**20.1**	**17**	**18**	**19**	**17**	**19**	**18**	**18**	**18**	**18**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.033**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-318																			
		Sample Date	1/14/2015	7/17/2014	1/27/2014	7/11/2013	7/13 DUP	1/9/2013	7/24/2012	2/6/2012	7/5/2011	07/11 DUP	2/23/2011	7/13/2010	1/7/2010	01/09 DUP	1/14/2009	7/16/2008	1/10/2008	01/08 DUP	7/12/2007	2/14/2007	02/07 DUP
			During Extraction																			
Volatile Organic Compounds																						
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 500	< 5,000	< 50	**380 J**	**390 J**	< 50	**160 J**	< 100	< 4000	< 4000	< 4000	< 50	< 50	< 50	< 50R	< 50
Benzene	5	µg/L	**1,400**	**1,700**	< 5.0	**3,300**	**3,300**	**670**	**3,700**	**1,700**	**4,600**	**4,500**	**3,500**	**1,100**	**5,700 D**	**7,300**	**5,900**	**3,700**	**5,200**	**5,200**	**6,200**	**5,300**	**5,400**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	< 6.0	< 30	< 30	< 6.0	< 50	<5.0	< 200	< 200	< 200	< 5.0	< 5.0	< 5	< 5	< 5
Ethylbenzene	700	µg/L	< 5	< 5.0	< 5.0	**11**	**9.4**	< 25	< 250	**8.6 J**	**14 J**	**15 J**	**21 J**	**9.3 J**	**32**	**510**	**410**	**460**	**660**	**660**	**810**	**970**	**990**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	< 10	< 50	< 50	< 10	< 50	<5.0	< 200	< 200	< 200	< 5.0	< 5.0	< 5	< 5 UJ	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	**4.7 J**	**21 J**	**34 J**	**8.2 J**	**750**	<5.0	< 200	< 200	< 200	**5.2**	< 5.0	< 5	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 250	< 1.3	< 6.5	< 6.5	< 1.3	< 50	<5.0	< 200	< 200	< 200	< 5.0	< 5.0	< 5	< 5	< 5
Xylenes, total	2,000	µg/L	**13**	**22**	< 5.0	**35**	**31**	< 25	< 250	**13 J**	**30 J**	**35 J**	**44 J**	**10 J**	**89**	**70 J**	**55 J**	**48 J**	**110**	**91**	**100**	**110**	**100**
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**37**	**31**	**2.8**	< 50	< 50	**11**	< 210	**28**	**30**	**35**	**42**	**7.2**	**28**	**25 J**	**26**	**28**	**56**	**46**	**54**	**40**	**37**
Acenaphthylene	10	µg/L	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 210	< 9.9	< 0.10	< 0.11	**0.46**	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Anthracene	10	µg/L	**0.81**	**0.88**	**0.055**	**0.73**	**0.76**	< 2.0	< 210	< 9.9	**0.96**	**0.96**	**0.85**	< 2.0	**0.74**	< 38	< 9.4	**0.85 J**	< 10	< 10	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0 *	< 0.19	< 38	< 9.4	< 3.8	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	< 0.11	< 0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 4.5	< 0.046	<0.047	<0.049	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 2.0	< 210	< 9.9	< 0.10	<0.11	<0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 1	**0.36**	<0.10	**0.32**	**0.34**	< 2.0	< 210	< 9.9	**0.39**	**0.44**	**0.40**	< 2.0	**0.34**	< 38	< 9.4	< 3.8	< 10	< 10	< 10	< 10	< 10
Fluorene	1,000	µg/L	**4.6**	**5**	**0.48**	**4.5**	**4.6**	< 2.0	< 210	< 9.9	**8.4**	**8.6**	6.7	**1.4 J**	**5.3**	< 38	**3.3 J**	**0.46 J**	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.50	< 0.050	< 0.050	< 0.050	< 0.050	< 2.0	< 210	< 9.9	< 0.10	<0.11	<0.11	< 2.0	< 0.19	< 38	< 9.4	< 3.8	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Naphthalene	20	µg/L	**920**	**730**	**7.3**	**820**	**820**	**160**	**880**	**550**	**770**	**870**	**1,000**	**110**	**780**	**720**	**680**	**720**	**1,400**	**1,100**	**1,100**	**820**	**790**
Phenanthrene	10	µg/L	**4.5**	**4.6**	**0.36**	**4.0**	**4.1**	< 2.0	< 210	< 9.9	**6.1**	**6.3**	**5.7**	**1.5 J**	**4.5**	< 38	**3.4 J**	**4.1**	< 10	< 10	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.5	**0.38**	0.050	**0.30**	**0.33**	< 2.0	< 210	< 9.9	**0.49**	**0.54**	**0.47**	< 2.0	**0.25**	< 38	< 9.4	< 3.8	<10	<10	< 10	< 10	< 10
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	**0.0063 J B**	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0500	< 0.0500	< 0.05	< 0.05	< 0.05
Barium	2	mg/L	**0.551**	**0.524**	**0.289**	**0.556**	**0.560**	**0.30**	**0.54**	**0.72**	**0.63**	**0.57**	**0.47**	**1.6**	**0.58**	**0.51**	**0.54**	**0.5**	**0.543**	**0.557**	**0.512**	**0.527**	**0.523**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	**0.00031 J**	< 0.00020	< 0.00020	< 0.00020	**0.00046 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	**0.00064 J**	< 0.0050	< 0.0050	**0.0064**	< 0.005	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0030 J B**	< 0.0012	< 0.0012	< 0.0012	**0.0055 J**	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.010	< 0.020	< 0.020	**0.0067 J**	< 0.020	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	**0.011**	< 0.010	< 0.010	< 0.010	< 0.0050	**0.021**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.0034 J**	< 0.0050	< 0.0050	**0.0025 J**	< 0.0050	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	**0.0034 J**	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	**0.00026 J**	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1.00	< 1	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0040 J**	< 0.0024	< 0.0024	< 0.0024	**0.0039 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	**0.0203**	< 0.0200	< 0.020	< 0.020	**0.022**	**0.016 J**	< 0.0087	**0.014 J**	**0.024**	<0.020	**0.046**	**0.076**	< 0.020	**0.118**	**0.211**	**0.0633**	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date	MW-318 (Continued)																
			7/12/2006	07/06 DUP	2/7/2006	1/11/2006	1/11/2006	7/19/2005	1/17/2005	7/14/2004	1/20/2004	7/15/2003	1/20/2003	7/15/2002	1/21/2002	01/02 DUP	7/17/2001	1/17/2001	01/01 DUP
			Pre-Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	50 R	50 R	--	1,200 U	1,200 U	500 U	25 U	2,500 U	2,500 U	1,300 U	620 U	620 U	620 U	620 U	620 U	620 UJ	25 U
Benzene	5	µg/L	**18**	**19**	--	**3,800**	**3,800**	**4,100**	**2,700 D**	**4,400**	**4,000**	**4,300**	**4,200**	**4,400**	**3,600**	**3,600**	**4,100**	**3,100**	**2,500 D**
Carbon Disulfide	4,000	µg/L	5 U	5 U	--	120 U	120 U	20 U	1.0 U	100 U	100 U	50 U	25 U	25 U	25 U	25 U	25 U	25 U	1.0 U
Ethylbenzene	700	µg/L	5 U	5 U	--	**730**	**720**	**800**	**680 D**	**800**	**810**	**960**	**960**	**1,100**	**650**	**630**	**880**	**710**	**390 E**
Methylene Chloride	5	µg/L	5 U	5 U	77 U	**210**	**200**	100 U	5.0 U	500 U	500 U	250 U	120 U	120 U	120 U	120 U	120 U	120 U	5.0 U
Toluene	1,000	µg/L	5 U	5 U	--	120 U	120 U	20 U	**3.5**	100 U	100 U	50 U	**17 J**	25 U	25 U	25 U	25 U	25 U	**3**
Trichloroethylene	5	µg/L	5 U	5 U	--	120 U	120 U	20 U	1.0 U	100 U	100 U	50 U	25 U	25 U	25 U	25 U	25 U	25 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	5 U	--	250 U	250 U	**77**	**64 D**	200 U	200 U	100 U	**96 B**	**100**	**61**	**62**	**110**	**76**	**80**
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	--	**76**	**72**	**72**	**59**	**76**	**91**	**86**	**95**	**100**	**70**	**54 J**	**85**	**79**	**0.076**
Acenaphthene	2,000	µg/L	10 U	10 U	--	**47**	**45**	**51**	**37**	**52**	**55**	**54**	**58**	**57**	**52**	**40 J**	**51**	**54**	**0.05**
Acenaphthylene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Anthracene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	**0.97**	10 U	**0.86 J**	**0.84 J**	50 U	100 U	50 U	**0.74 J**	**0.72 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.1 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.1 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	33 U	5.0 U	8.0 U	8.0 U	20 U	**2.4**	10 U	**3.1 J**	**2.9 J**	**2.7 J**	100 U	**2.5 J**	**3.3 J**	**3.0 J**
Fluoranthene	1,000	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	**0.44**	10 U	**0.46 J**	**0.42 J**	50 U	100 U	50 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	10 U	--	6.7 U	**5.7**	8.0 U	8.0 U	20 U	**7.5**	10 U	**7.7 J**	**8.3 J**	**5.5 J**	**4.6 J**	**6.0 J**	**7.6 J**	**7.1 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.05 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	0.2 U	10 U	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Naphthalene	20	µg/L	10 U	10 U	--	**860**	**790**	**810**	**670**	**950**	**980**	**1,100**	**1,000 D**	**920 D**	**950**	**740**	**1,100 D**	**950 D**	**880 D**
Phenanthrene	10	µg/L	10 U	10 U	--	6.7 U	**5.1**	8.0 U	8.0 U	20 U	**7.1**	10 U	**7.1 J**	**6.8 J**	**6.3 J**	**5.1 J**	**5.0 J**	**6.3 J**	**6.0 J**
Pyrene	1,000	µg/L	10 U	10 U	--	6.7 U	5.0 U	8.0 U	8.0 U	20 U	**0.46**	0.01 UJ	10 U	10 U	50 U	100 U	50 U	10 U	10 U
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	--	**0.541**	0.2 U	**0.714**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.035 B**	0.2 U	0.2 U	**0.057 BN**	0.2 U	**0.18 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	--	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.149**	**0.143**	--	**0.388**	**0.386**	**0.397**	**0.38**	**0.4**	**0.39**	**0.36**	**0.36**	**0.37**	**0.36**	**0.35**	**0.35**	**0.36**	**0.36**
Beryllium	0.004	mg/L	0.01 U	0.01 U	--	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00059 B**
Cadmium	0.005	mg/L	0.005 U	0.005 U	--	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	**43.2**	**41.5**	**47.9**	**40**	**41**	**42**	**41**	**38**	**39**	**38**	**37**	**37**	**36**	**37**
Chromium	0.1	mg/L	0.01 U	0.01 U	--	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0016 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.01 U	--	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0017 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	--	**0.828**	**0.802**	**0.926**	**0.75**	**0.79**	**0.77**	**0.77**	**0.7**	**0.74 N**	**0.7**	**0.66**	**0.74**	**0.74**	**0.72**
Lead	0.015	mg/L	0.01 U	0.01 U	--	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0030 U	**0.0023 B**
Magnesium	*	mg/L	--	--	--	**24**	**23.8**	**26**	**23**	**23**	**24**	**23**	**22**	**22**	**22**	**21**	**22**	**21**	**21**
Manganese	*	mg/L	--	--	--	**0.677**	**0.675**	**0.675**	**0.64**	**0.65**	**0.65**	**0.67**	**0.58**	**0.6**	**0.58**	**0.57**	**0.57**	**0.58**	**0.59**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00014 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.02 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	--	5 U	5 U	**4.37**	**3.8**	**3.9**	**3.7**	**3.7**	**3.3**	**3.5**	**3.4**	**3.4**	**3.4**	**3.6**	**3.6**
Selenium	0.05	mg/L	0.02 U	0.02 U	--	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0047 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	**16.2**	**16.1**	**18**	**15**	**16**	**16**	**19**	**15**	**15**	**14**	**14**	**15**	**15**	**15**
Thallium	0.002	mg/L	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UWN	0.002 U	0.002 U	0.002 UWN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.596**	**0.581**	--	0.02 U	0.02 U	**0.0308 J**	**0.028**	**0.026**	0.02 U	**0.03**	**0.02**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-319															
		Sample Date	1/14/2015	7/14/2014	1/7/2014	7/9/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/17/2011	7/13/2011	1/5/2010	7/22/2009	01/14/2009	07/16/2008	1/9/2008	7/11/2007	2/15/2007
		Unit	During Extraction															
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	**3.2 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	**0.075**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	**0.25**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	**0.16**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	**0.33**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	**0.22**	< 0.050	< 0.19	< 0.096	< 0.11	**0.11 J**	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.05	< 0.050	**0.19**	< 0.050	< 0.19	< 0.043	< 0.048	**0.065 J**	< 0.044	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	**0.27**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	**0.14**	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	**0.1**	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	**0.29**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	**0.15**	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	**0.033 J**	**0.05 J**	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	**0.056**	**0.085**	< 0.050	< 0.19	< 0.096	< 0.11	< 0.10	< 0.098	< 0.19	< 0.20	< 0.19	< 0.21	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.642**	**0.132**	**0.692**	**0.668**	**0.93**	**0.73**	**0.28**	**0.92**	**0.89**	**0.94**	**0.82**	**0.67**	**0.38**	**0.69**	**0.820**	**0.704**	**0.743**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00020 J**	**0.00031 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0028 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	**0.0038 J**	< 0.020	< 0.020	**0.0029 J**	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.027**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	**0.0043 J**	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	**0.0036 J**	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	**0.0023 J**	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	**0.0094 J**	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-319 (Continued) 7/13/2006	1/12/2006	7/18/2005	1/17/2005	7/13/2004	1/20/2004	7/15/2003	1/21/2003	7/11/2002	1/17/2002	7/16/2001	7/01 DUP	1/16/2001
			Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	**15 J**	25 U	25 U	25 U	25 U	25 UJ
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.33 J**
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.35 J**	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.29 J**
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.49 J**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	**1.72**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.071 B**	**0.2**	**0.05 B**	**0.057 B**	**0.031 J**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0058 B**	0.02 U	**0.0065 J**
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0037 B**	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.736**	**0.642**	**0.603**	**0.61**	**0.6**	**0.6**	**0.52**	**0.6**	**0.55**	**0.67**	**0.62**	**0.62**	**0.68**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00072 B**	0.004 U	0.004 U	0.00073 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**36.5**	**29.5**	**28**	**28**	**29**	**31**	**28**	**28**	**33**	**30**	**30**	**34**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.003 B**	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0047 B**	**0.0042 B**	**0.0058 B**	**0.0053 B**	**0.0048 B**	**0.0058 J**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0019 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**4.23**	**4.03**	**4.1**	**3.8**	**4.3**	**3.8**	**4.3**	**3.5**	**5.3**	**4.4**	**4.3**	**4.7**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0025 U
Magnesium	*	mg/L	--	**16.2**	**13.2**	**13**	**13**	**13**	**12**	**14**	**11**	**16**	**14**	**14**	**15**
Manganese	*	mg/L	--	**1.11**	**1.08**	**1.1**	**1.1**	**1.2**	**1.1**	**1.1**	**0.94**	**1.3 N**	**1.1**	**1.1**	**1.2**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	**0.0052 B**	0.04 U	0.04 U	**0.0055 J**
Potassium	*	mg/L	--	5 U	**3.68**	**3.4**	**3.4**	**3.4**	**3.2**	**3.1**	**3.5**	**3.6 N**	**3.7**	**3.6**	**4.3**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	**14.9**	**14.8**	**13**	**14**	**13**	**14**	**14**	**14**	**14**	**15**	**14**	**15**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.04**	**0.04**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-320															
		Sample Date	1/12/2015	7/14/2014	1/6/2014	7/9/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/17/2011	7/13/2010	1/5/2010	7/22/2009	01/14/2009	07/16/2008	1/9/2008	7/11/2007	2/14/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	**0.54 J**	< 5.0	< 5	< 5
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	**0.45 J**	< 5.0	< 5	< 5
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	**0.56 J**	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.095	**0.12 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	**0.053**	< 0.050	< 0.20	< 0.095	**0.18 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.095	< 0.11	< 0.11	**0.13 J**	**0.10 J***	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	**0.12**	< 0.10	< 0.20	< 0.095	**0.15 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	**0.066**	< 0.050	< 0.20	< 0.095	**0.38**	< 0.11	**0.13 J**	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.05	< 0.050	< 0.050	**0.051**	< 0.20	< 0.043	**0.23 B**	< 0.048	**0.086 J**	**0.12 J**	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	**0.13**	< 0.10	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	**0.12**	< 0.20	< 0.095	**0.43**	< 0.11	**0.17 J**	**0.22**	< 0.19	**0.36**	**0.022 J**	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.095	< 0.11	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	**0.090**	< 0.050	< 0.20	< 0.095	**0.15 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**13**	< 0.50	< 0.50	< 0.50	< 0.20	< 0.095	< 0.11	**0.11 J**	< 0.11	< 0.20	< 0.19	< 0.19	**0.052 J**	0.33	< 10	< 10	< 10
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.095	**0.11 J**	< 0.11	< 0.11	< 0.20	< 0.19	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	**0.081**	< 0.20	< 0.095	**0.30**	< 0.11	**0.14 J**	**0.17 J**	< 0.19	**0.26**	< 0.20	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0287**	**0.268**	**0.264**	**0.267**	**0.096**	**0.26**	**0.29**	**0.076**	**0.25**	**0.097**	**0.097**	**0.27**	**0.22**	**0.27**	**0.284**	**0.240**	**0.278**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	**0.0013 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.013**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0018 J**	**0.0018 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-320 (continued) 7/13/2006 Pre-Extraction	1/11/2006	7/20/2005	1/18/2005	7/13/2004	1/20/2004	7/15/2003	1/21/2003	7/11/2002	1/18/2002	7/16/2001	1/17/2001
Volatile Organic Compounds														
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 UJ
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	--	**0.626**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.034 B**	**0.031 J**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.273**	**0.237**	**0.23**	**0.25**	**0.26**	**0.25**	**0.23**	**0.18**	**0.26**	**0.26**	**0.24**	**0.25**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**19.9**	**19.7**	**19**	**19**	**19**	**18**	**22**	**19**	**19**	**18**	**19**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0015 B**	**0.0019 B**	**0.0017 J**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0018 B**	0.02 U	**0.0013 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.71**	**1.78**	**1.7**	**1.7**	**1.8**	**1.7**	**0.097**	**1.8**	**1.8**	**1.7**	**1.8**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.0024 U
Magnesium	*	mg/L	--	**10.8**	**11.3**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**
Manganese	*	mg/L	--	**1.15**	**1.1**	**1.2**	**1.2**	**1.2**	**1.2**	**0.0094 B**	**1.2**	**1.1**	**1.1**	**1.2**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	**2.62**	**2.8**	**2.8**	**2.8**	**2.6**	**3.6**	**2.8**	**2.7**	**2.6**	**2.9**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0043 UJ
Sodium	*	mg/L	--	**9.84**	**10.8**	**9.7**	**10**	**9.8**	**11**	**11**	**10**	**10**	**9.8**	**9.9**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UN	0.002 UW	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.019 B**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
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Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
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J - Estimated analyte concentration
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Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-321																	
		Sample Date	1/13/2015	7/14/2014	1/8/2014	7/10/2013	7/10 DUP	1/9/2013	7/25/2012	1/24/2012	7/6/2011	07/11 DUP	1/19/2011	7/15/2010	1/7/2010	7/23/2009	01/21/2009	07/18/2008	1/9/2008	7/10/2007	2/14/2007
		Unit	During Extraction																	
Volatile Organic Compounds																					
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 25	< 25	< 120	< 2500	<4000	< 1000	< 500	< 2000	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	**330**	**360**	**5.0**	< 5.0	**12**	**500**	**650**	**2,900**	**3,300**	**4,000**	**2,600**	**630**	**2,200**	**2,400**	**2,600**	**3,700**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.67 J**	< 3.0	< 3.0	< 15	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1.6 J**	**0.82 J**	**1.2 J**	**100 J**	210	**430**	**200**	**37**	**150**	**160**	**120**	**280**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	< 5.0	< 25	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.40 J**	< 1.7	< 1.7	**24 J**	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.65	< 0.65	< 3.2	< 120	<200	< 50	< 25	< 100	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.44 J**	**2.1 J**	**1.9 J**	**8.8 J**	**18 J**	<200	< 50	**10 J**	**27 J**	**58**	**52**	**100**
Semivolatile Organic Compounds																					
Acenaphthene	2,000	µg/L	< 0.5	**2.1**	< 0.50	**13**	**12**	**0.19**	**0.29**	**43 D**	**12**	**24**	**24**	**40**	**30**	**21**	**3.4**	**13**	**32**	**37**	**27**
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 1.0	**0.82**	**0.20**	**1.7**	**0.42**	< 1.0	**0.19 J**	< 19	**1.0**	< 0.94	**0.35**	**0.71**	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	**0.13**	< 0.050	**0.26**	**0.26**	< 0.19	< 0.19	**0.66**	**0.23**	< 1.0	**0.29**	< 19	**0.59**	< 0.94	**0.068 J**	**1.7**	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.043	< 0.048	< 0.45	**0.059 J**	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	<0.20	< 0.94	< 0.21	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	**0.12**	**0.11**	< 0.19	< 0.19	**0.28**	**0.12 J**	< 1.0	**0.12 J**	< 19	0.2	< 0.94	0.037 J	**0.098**	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	**0.48**	< 0.10	**2.2**	**2.1**	**0.94**	**0.29**	**7.2**	**2.9**	**5.2**	**3.4**	< 19	**6.5**	**3.5**	**0.75**	**2.1**	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 1.0	< 0.11	< 19	< 0.20	< 0.94	< 0.21	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**5.7**	**3.3**	< 0.50	**240**	**150**	**13**	**3.9**	**1,100 D**	**250**	**470**	**560**	**1,000**	**680**	**610**	**66**	**3.0**	**410**	**350**	**570**
Phenanthrene	10	µg/L	< 0.05	**0.7**	< 0.050	**1.8**	**1.7**	**1.1**	**0.48**	**5.8**	**1.7**	**3.1**	**2.2**	< 19	**4.3**	**2.2**	**0.46**	**1.7**	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	**0.11**	< 0.050	**0.096**	**0.100**	< 0.19	< 0.19	**0.29**	**0.14 J**	< 1.0	**0.14 J**	< 19	<0.20	< 0.94	**0.043 J**	**0.11 J**	<10	< 10	< 10
Inorganic Compounds																					
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0606**	**0.0573**	**0.0662**	**0.244**	**0.237**	**0.14**	**0.094**	**0.30**	**0.30**	**0.27**	**0.30**	**0.31**	**0.30**	**0.32**	**0.26**	**0.31**	**0.321**	**0.294**	**0.314**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	**0.00026 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019	**0.0030 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.013**	**0.016**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0029 J**	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	**0.0017 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-321 (Continued)																
			7/11/2006	7/06 DUP	1/14/2006	01/06 DUP	7/21/2005	1/21/2005	7/16/2004	1/23/2004	01/04 DUP	7/17/2003	07/03 DUP	1/22/2003	01/03 DUP	7/15/2002	1/22/2002	7/18/2001	1/22/2001
			Pre-Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	50 R	50 R	2,500 U	2,500 U	500 U	1,200 U	1,200 U	1,200 U	1,200 U	1,300 U	1,300 U	1,200 U	1,200 U	250 U	250 U	**250 R**	250 U
Benzene	5	µg/L	**4,500**	**5,100**	**6,200**	**6,100**	**5,300**	**6,500**	**6,900**	**6,500**	**6,900**	**6,500**	**6,400**	**5,700**	**5,700**	**4,800 D**	**6,000 D**	**7,900 D**	**1,800**
Carbon Disulfide	4,000	µg/L	5 U	5 U	250 U	250 U	20 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	10 U	10 U	10 U	10 U
Ethylbenzene	700	µg/L	**340**	**380**	**1,300**	**1,200**	**1,200**	**1,400**	**1,400**	**1,500**	**1,500**	**1,400**	**1,400**	**1,000**	**980**	**1,100**	**1,100**	**1,600**	**360**
Methylene Chloride	5	µg/L	5 U	5 U	250 U	250 U	100 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	50 U	50 U	50 U	50 U
Toluene	1,000	µg/L	5 U	5 U	250 U	250 U	20 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**12**	**10**	**110**	**9.6 J**
Trichloroethylene	5	µg/L	5 U	5 U	250 U	250 U	20 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	10 U	10 U	10 U	10 U
Xylenes, total	2,000	µg/L	**110**	**110**	500 U	500 U	**260**	**260**	**290**	**360**	**370**	**550**	**560**	**490**	**500**	**560**	**610**	**890**	**290**
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	**280**	**330**	**270**	**240**	**230**	**320**	**330**	**280**	**250**	**170 DJ**	**180 DJ**	**38**	**360**	**320**	**300**
Acenaphthene	2,000	µg/L	**63**	**57**	**130**	**130**	**98**	**84**	80 U	**50**	**85**	**110**	**99**	**88**	**90**	**8.2 J**	**120**	**120**	**110**
Acenaphthylene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**0.34**	**0.58**	10 U	10 U	**1.3 J**	**1.2 J**	**3.4 J**	10 U	50 U	10 U
Anthracene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**2.5**	**2.3**	10 U	10 U	**1.7 J**	**1.8 J**	10 U	10 U	**2.1 J**	**2.5 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.1 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.1 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Dibenzofuran	1	µg/L	--	--	80 U	100 U	20 U	40 U	80 U	**3.0**	**2.3**	10 U	10 U	**3.8 J**	**4.0 J**	**0.45 J**	**5.5 J**	**5.1 J**	**4.7 J**
Fluoranthene	1,000	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**0.96**	**0.89**	10 U	10 U	**0.78 J**	**0.85 J**	10 U	10 U	50 U	**0.97 J**
Fluorene	1,000	µg/L	**11**	10 U	**17**	20 U	20 U	40 U	80 U	**12**	**11**	**17**	**16**	**17**	**17**	**1.5 J**	**19 J**	**19 J**	**18**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.05 U	16 U	20 U	20 U	40 U	80 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U
Naphthalene	20	µg/L	**1,500 J**	**150 J**	**2,700**	**3,300**	**3,000**	**2,500**	**2,600**	**3,000**	**3,000**	**4,800**	**3,800**	**1,900 D**	**1,900 D**	**540 D**	**2,900 D**	**3,300D**	**4,000 D**
Phenanthrene	10	µg/L	10 U	10 U	**23**	**23**	20 U	40 U	80 U	**16**	**16**	**16**	**14**	**14**	**15**	**1.0 J**	**21 J**	**20 J**	**17**
Pyrene	1,000	µg/L	10 U	10 U	16 U	20 U	20 U	40 U	80 U	**0.99**	**0.92**	10 U	10 U	**0.82 J**	**0.72 J**	10 U	10 U	50 U	**0.94 J**
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	**0.293**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.22**	0.2 U	0.2 U	**0.031 BN**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.01 U	0.01 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.325**	**0.309**	**0.288**	**0.281**	**0.283**	**0.27**	**0.27**	**0.26**	**0.24**	**0.25**	**0.25**	**0.26**	**0.26**	**0.31**	**0.24**	**0.23**	**0.25**
Beryllium	0.004	mg/L	0.01 U	0.01 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**40.7**	**39**	**38.1**	**38**	**35**	**36**	**35**	**32**	**33**	**33**	**33**	**35**	**31**	**31**	**32**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0049 B**	**0.0052 B**	**0.0066 B**	0.01 U	0.01 U	**0.0018 B**
Cobalt	*	mg/L	--	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0025 B**	**0.0021 B**	**0.0027 B**	**0.0012 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	**0.529**	**0.523**	**0.526**	**0.49**	**0.43**	**0.46**	**0.45**	**0.41**	**0.37**	**0.4**	**0.43**	**0.72 N**	**0.43**	**0.41**	**0.45**
Lead	0.015	mg/L	0.01 U	0.01 U	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	**16.9**	**16.6**	**15.4**	**16**	**14**	**14**	**14**	**14**	**15**	**14**	**14**	**14**	**13**	**13**	**13**
Manganese	*	mg/L	--	--	**0.308**	**0.301**	**0.307**	**0.31**	**0.29**	**0.29**	**0.27**	**0.27**	**0.27**	**0.26**	**0.26**	**0.31**	**0.25**	**0.25**	**0.27**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	0.0002 UJ	**0.000097 B**	**0.00009 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.02 U	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0057 B**	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	--	5 U	5 U	**3.19**	**3.7**	**3.7**	**3.5**	**3.3**	**3.2**	**3.6**	**5.4**	**5.5**	**8.5**	**3**	**3.1**	**3.1**
Selenium	0.05	mg/L	0.02 U	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0049 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**16.7**	**16.2**	**17**	**15**	**15**	**15**	**15**	**15**	**16**	**15**	**15**	**15**	**15**	**14**	**14**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 UWN	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.07**	**0.012 B**	**0.016 B**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-324															
		Sample Date	1/13/2015	7/14/2014	1/8/2014	7/10/2013	1/9/2013	7/25/2012	1/24/2012	7/5/2011	1/19/2011	7/15/2010	1/7/2010	7/29/2009	1/15/2009	7/18/2008	1/10/2008	7/10/2007	2/14/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 50	< 5.0	< 5.0	< 2000	< 100	< 100	< 1000	< 100	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**20**	**1,200 J H**	< 0.25	**11**	**1,600**	**6,400 D**	< 5.0	**870**	**80**	**18**	**2,300**	**3,700**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 0.60	**2.4 J**	< 100	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**25 J**	< 0.11	**2.5 J**	**190**	**900**	< 5.0	**110**	**9.1**	< 5.0	**160**	**440**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 1.0	< 100	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**7.4 J**	< 0.33	**1.2 J**	7.4 J	**52**	< 5.0	**4.4 JB**	**0.75 J**	< 5.0	**19**	**24**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.3	< 0.13	< 0.13	< 100	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**29 J**	< 0.20	**0.44 J**	**25 J**	**150**	< 5.0	**14 J**	**2.1**	< 5.0	**49**	**140**
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	**0.35**	**0.24**	< 0.11	< 0.099	< 19	**49**	< 0.19 *	**3.5 J**	**0.4**	< 10	**21**	**36**
Acenaphthylene	10	µg/L	< 1	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**0.96**	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**1.2**	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.043	< 0.050	< 0.044	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**0.87**	< 0.19	< 3.9	< 0.20	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**8.7**	< 0.19	**0.54 J**	**0.055**	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	< 0.20	< 0.19	< 3.9	< 0.20	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	**5.3**	**0.7**	**0.98**	< 0.50	**0.70**	**3.9**	**6.1**	< 0.11	**1.6**	**290**	**1,600**	< 0.19	**100 B**	**0.15**	< 10	**290**	**760**
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	**0.15 J**	< 0.11	< 0.099 *	< 19	**8.1**	< 0.19	**0.68 J**	**0.065**	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.095	< 0.11	< 0.099	< 19	**0.87**	< 0.19	< 3.9	**0.034**	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0232**	**0.0657**	**0.0674**	**0.0693**	**0.061**	**0.089**	**0.081**	**0.079**	**0.078**	**0.072**	**0.21**	**0.066**	**0.082**	**0.076**	**0.0690**	**0.0849**	**0.181**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00022 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	**0.0066**	**0.0073**	< 0.0050	< 0.0020	**0.0020 J**	**0.0020 J**	< 0.0050	< 0.0050	< 0.0050	**0.00069 J**	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0043 J**	**0.0013 J**	< 0.010	< 0.010	< 0.010	**0.0028 J**	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	**0.0176**	**0.0161**	**0.0192**	< 0.020	< 0.020	**0.0040 J**	**0.0064 J**	**0.0098 JB**	< 0.020	< 0.020	< 0.020	**0.013 J**	**0.0097 J**	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0095 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0031 J**	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0028 J**	**0.0029 J**	**0.0034 J**	< 0.040	< 0.040	< 0.040	**0.0088 J**	**0.0069 J**	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0052 J**	**0.0042 J**	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0205**	< 0.0200	< 0.0200	**0.0337**	< 0.020	< 0.020	< 0.0087	**0.0091 J**	< 0.0087	< 0.020	< 0.020	< 0.020	**0.033**	**0.018 J**	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-324 (Continued)												
			7/11/2006	1/14/2006	01/06 DUP	7/22/2005	1/19/2005	7/16/2004	1/23/2004	7/17/2003	1/22/2003	7/11/2002	07/02 DUP	1/23/2002	7/18/2001
		µg/L	Pre-Extraction												
Volatile Organic Compounds															
Acetone	4,000	µg/L	50 U	5,000 U	5,000 U	830 U	2,500 U	2,500 U	2,500 U	630 U	5,000 U	5,000 U	5,000 U	5,000 U	**5,000 R**
Benzene	5	µg/L	**1,900**	**13,000**	**13,000**	**14,000**	**12,000**	**14,000**	**16,000**	**15,000**	**14,000**	**15,000**	**12,000**	**16,000**	**15,000**
Carbon Disulfide	4,000	µg/L	5 U	500 U	500 U	33 U	100 U	100 U	100 U	25 U	200 U	200 U	200 U	200 U	200 U
Ethylbenzene	700	µg/L	**89**	**2,000**	**2,100**	**2,100**	**2,500**	**2,500**	**2,600**	**2,500**	**2,400**	**2,500**	**2,500**	**2,800**	**2,700**
Methylene Chloride	5	µg/L	5 U	500 U	500 U	170 U	500 U	500 U	500 U	130 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
Toluene	1,000	µg/L	**29**	500 U	500 U	**520**	**540**	**320**	**720**	**1,100**	**1,400**	**1,200**	**1,300**	**1,900**	**2,600**
Trichloroethylene	5	µg/L	5 U	500 U	500 U	33 U	100 U	100 U	100 U	25 U	200 U	200 U	200 U	200 U	200 U
Xylenes, total	2,000	µg/L	**90**	**1,000**	**1,100**	**1,500**	**1,600**	**1,500**	**1,800**	**1,700**	**1,800**	**1,700**	**1,800**	**2,300**	**2,400**
Semivolatile Organic Compounds															
2-Methylnaphthalene	*	µg/L	--	**430**	**490**	**390**	**320**	**290**	**390**	**370 J M**	**700**	**480**	**440**	**770**	**670**
Acenaphthene	2,000	µg/L	**20**	**180**	**180**	**120**	**110**	**110**	**110**	**120 J M**	**230**	**180**	**160**	**230**	**230**
Acenaphthylene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	**4.0**	**11**	**21 J**	**9.7 J**	**9.4 J**	100 U	**28 J**
Anthracene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	**4.8 J**	**4.9 J**	**4.6 J**	**4.5 J**	**3.8 J**
Benz(a)anthracene	0.1	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(g,h,i)perylene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Benzo(k)fluoranthene	10	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Chrysene	0.2	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Dibenzofuran	1	µg/L	--	20 U	100 U	20 U	100 U	80 U	2.0 U	10 U	**8.8 J**	**6.6 J**	**6.7 J**	**11 J**	**8.9 J**
Fluoranthene	1,000	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Fluorene	1,000	µg/L	10 U	**23**	**24**	20 U	100 U	80 U	**23**	**21**	**35 J**	**29 J**	**26 J**	**38 J**	**35 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Naphthalene	20	µg/L	**170**	**4,400**	**4,300**	**3,500**	**3,700**	**3,600**	**4,600**	**4,400 J M**	**7,500 D**	**5,000 D**	**4,400 D**	**5,900 D**	**8,600 D**
Phenanthrene	10	µg/L	10 U	**27**	**28**	20 U	100 U	80 U	**22**	**18**	**36 J**	**26 J**	**26 J**	**41 J**	**34 J**
Pyrene	1,000	µg/L	10 U	20 U	20 U	20 U	100 U	80 U	2.0 U	10 U	100 U	100 U	100 U	100 U	50 U
Inorganic Compounds															
Aluminum (fume or dust)	*	mg/L	--	**0.303**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.058 B**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0682**	**0.243**	**0.239**	**0.237**	**0.24**	**0.23**	**0.21**	**0.21**	**0.22**	**0.24**	**0.24**	**0.22**	**0.22**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	**40.9**	**39.8**	**43.2**	**38**	**37**	**37**	**33**	**35**	**34**	**34**	**35**	**44**
Chromium	0.1	mg/L	0.01 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.01 U	0.025 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0015 B**	**0.00092 B**	0.02 U	**0.0017 B**	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	**0.11**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**0.62**	**0.516**	**0.533**	**0.48**	**0.46**	**0.37**	**0.38**	**0.36**	**0.33**	**0.31**	**0.37**	**0.37**
Lead	0.015	mg/L	0.01 U	0.003 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0019 B**	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	**13.8**	**13.6**	**14.1**	**13**	**12**	**11**	**11**	**11**	**11**	**11**	**11**	**10**
Manganese	*	mg/L	--	**0.33**	**0.324**	**0.333**	**0.34**	**0.32**	**0.29**	**0.28**	**0.28**	**0.29**	**0.29**	**0.26**	**0.23**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 UJ	**0.000095 B**	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	5 U	5 U	**3.58**	**3.7**	**3.7**	**4.4**	**3.1**	**3.4**	**3.6**	**3.6**	**3.3**	**4.4**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.006 B**	0.01 U
Sodium	*	mg/L	--	**16.3**	**16.1**	**17.9**	**15**	**15**	**18**	**15**	**15**	**17**	**17**	**15**	**16**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 UJ	0.002 U	0.002 UN	0.002 UN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.019 B**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-325															
		Sample Date	1/13/2015	7/14/2014	1/6/2014	7/9/2013	1/8/2013	7/23/2012	1/16/2012	7/5/2011	1/18/2011	7/13/2010	1/6/2010	7/21/2009	1/14/2009	7/17/2008	1/9/2008	7/11/2007	2/15/2007
		Unit	During Extraction																
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 100 U	< 100	< 100	< 100	**120**	< 50	< 50	< 50
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	< 0.25	**0.36 J**	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**3,700**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 0.60	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 0.11	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**440**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33	< 0.33	**0.49 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**24**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 0.13	< 5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	**0.31 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5	**140**
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	**36**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.043	< 0.045	< 0.050	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.1	< 0.1
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.05	< 0.05
Naphthalene	20	µg/L	< 0.5	< 0.50	< 0.50	< 0.50	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	**0.058 J**	< 0.19	< 10	< 10	**760**
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Pyrene	1,000	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.096	< 0.10	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.0046	**0.0047 J**	< 0.0046	**0.0047 J**	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0500	< 0.05	< 0.05
Barium	2	mg/L	**0.0553**	**0.0744**	**0.0326**	**0.0284**	**0.026**	**0.022**	**0.025**	**0.027**	**0.023**	**0.022**	**0.033**	**0.025**	**0.025**	**0.03**	**0.0413**	**0.0571**	**0.181**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.010
Cadmium	0.005	mg/L	**0.009**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	**0.00093 J**	< 0.0050	< 0.0050	< 0.005	< 0.005
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.020	< 0.020	< 0.020	**0.0023 J**	< 0.020	< 0.0100	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	**0.0083 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0023 J**	< 0.0100	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 1
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	<0.010	**0.0029 J**	**0.0034 J**	**0.0027 J**	**0.0029 J**	**0.0027 J**	< 0.010	< 0.010	**0.0039 J**	**0.0034 J**	< 0.0100	< 0.010	< 0.010
Zinc	2	mg/L	**0.0573**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	**0.015 J**	< 0.020	< 0.0200	< 0.02	< 0.02

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID / Sample Date / Unit	MW-325 (Continued) 7/13/2006	1/12/2006	7/19/2005	1/17/2005	7/14/2004	1/21/2004	7/15/2003	1/21/2003	7/12/2002	1/18/2002	7/17/2001
			Pre-Extraction										
Volatile Organic Compounds													
Acetone	4,000	µg/L	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**	1.0 U	**0.13 J**
Carbon Disulfide	4,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1**	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.3 J**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.35 J**	1.0 U	1.0 U
Trichloroethylene	5	µg/L	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds													
2-Methylnaphthalene	*	µg/L	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.35 J**	10 U	10 U
Acenaphthylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	10 U	0.2 U	0.2 U	**0.28**	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U
Inorganic Compounds													
Aluminum (fume or dust)	*	mg/L	--	**0.817**	**0.978**	**0.25**	0.2 U	0.2 U	**2.7**	0.2 U	**0.2 B**	**2.1**	**30 N**
Antimony	0.01	mg/L	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.021**
Barium	2	mg/L	**0.134**	0.2 U	**0.102**	**0.09**	**0.097**	**0.091**	**0.12**	**0.042**	**0.072**	**0.12**	**0.38**
Beryllium	0.004	mg/L	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0042**
Cadmium	0.005	mg/L	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	**0.002 B**
Calcium metal	*	mg/L	--	**18.5**	**25.2**	**16**	**20**	**16**	**24**	**3.2**	**21**	**27**	**65**
Chromium	0.1	mg/L	0.01 U	0.005 UJ	0.01 U	0.01 U	0.01 U	0.01 U	**0.03**	0.01 U	**0.0061 B**	**0.17**	**0.23**
Cobalt	*	mg/L	--	0.007 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	**0.0036 B**	**0.058**
Copper	1.3	mg/L	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0018 B**	**0.0015 B**	**0.0073 B**	**0.059**
Cyanide	0.2	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	**1.13**	**0.54**	**0.54**	**0.28**	**0.45**	**4.8**	**0.035 B**	**0.17**	**3.6**	**41**
Lead	0.015	mg/L	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.01**	0.005 U	0.005 U	**0.0039 B**	**0.063**
Magnesium	*	mg/L	--	**7.93**	**7.87**	**6.7**	**7**	**7.4**	**9.7**	**0.65**	**3.3**	**8.7**	**30**
Manganese	*	mg/L	--	**0.258**	**0.28**	**0.24**	**0.26**	**0.28**	**0.35**	**0.0016 B**	**0.057**	**0.25**	**0.97**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	0.1	mg/L	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	**0.0049 B**	**0.11**	**0.18**
Potassium	*	mg/L	--	5 U	**3.16**	**4**	**3.5**	**2.9**	**4.2**	**8.4**	**8**	**6.2**	**15**
Selenium	0.05	mg/L	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0061 B**	0.01 U
Sodium	*	mg/L	--	**11.8**	**12.9**	**12**	**12**	**12**	**13**	**13**	**13**	**12**	**12**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UW	0.002 UWN	0.002 UW	0.002 UWN
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	**0.0025 B**	**0.0052 B**	**0.062**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.07**	**0.023**	0.02 U	**0.039**	**0.62**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-500BR															
		Sample Date	1/14/2015	7/16/2014	1/8/2014	7/9/2013	1/10/2013	7/26/2012	1/18/2012	7/6/2011	1/19/2011	7/13/2010	1/12/2010	7/23/2009	1/09 DUP	1/13/2009	7/17/2008	1/9/2008	7/10/2007
		Unit	During Extraction															
Volatile Organic Compounds																		
Acetone	4,000	µg/L	< 5000	< 5000	< 5,000	< 50	< 10,000	< 5,000	< 250	**330 J**	< 250	< 5000	< 5000	< 10000	< 5000	< 5000	< 500	< 50	< 50
Benzene	5	µg/L	**13,000**	**9,300**	**10,000**	**9,200**	**9,700**	**14,000**	**11,000**	**9,800**	**8,200**	**7,000**	**5,200**	**5,600**	**6,400**	**5,600**	**4,300**	**12,000**	**7,700**
Carbon Disulfide	4,000	µg/L	< 500	< 500	< 500	< 5.0	< 500	< 250	< 30	< 30	< 30	< 250	< 250	< 500	< 250	< 250	< 25	< 5.0	< 5.0
Ethylbenzene	700	µg/L	**1,200**	**620**	**1,000**	**420**	**820**	**1,600**	**1,000**	**730**	**820**	**620**	**470**	< 500	**570**	**390**	**530**	**1,300**	**620**
Methylene Chloride	5	µg/L	< 500	< 500	< 500	< 5.0	< 500	< 250	< 50	< 50	< 50	< 250	<250	< 500	< 250	< 250	< 25	< 5.0	< 5.0
Toluene	1,000	µg/L	< 500	< 500	< 500	**11**	< 500	< 250	**24 J**	**57 J**	**68 J**	**29 J**	< 250	< 500	**38 J**	**36 J**	**38**	**140**	**15**
Trichloroethylene	5	µg/L	< 500	< 500	< 500	< 5.0	< 500	< 250	< 6.5	< 6.5	< 6.5	< 250	< 250	< 500	< 250	< 250	< 25	< 5.0	< 5.0
Xylenes, total	2,000	µg/L	**610**	< 500	**670**	**450**	**560**	**1100**	**790**	**780**	**760**	**640**	**420**	< 500	**470**	**310**	**350**	**850**	**280**
Semivolatile Organic Compounds																			
Acenaphthene	2,000	µg/L	**86**	**48**	**71**	**30**	**42**	< 210	**110**	**60**	**67**	**42**	**38**	**39**	**15**	**15**	**32**	**91 J**	**23**
Acenaphthylene	10	µg/L	**1.2**	< 1.0	**2.2**	**1.7**	< 19	< 210	**2.3**	**1.4**	**1.6 J**	**1.0 J**	**1.9**	< 2.0	< 9.4	< 9.4	**1.1 J**	< 10	< 10
Anthracene	10	µg/L	**1.6**	**0.69**	**1.1**	**0.082**	< 19	< 210	**1.0**	**0.68**	< 0.99	< 1.9	**0.30**	< 2.0	< 9.4	< 9.4	**0.34 J**	< 10	< 10
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.50 J**	< 0.050	< 0.050
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.32 J**	< 0.050	< 0.050
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9 *	<0.19	< 2.0	< 9.4	< 9.4	**0.43 J**	< 0.10	< 0.10
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	< 1.9	< 10	< 10
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.40 J**	< 10	< 10
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.046	< 0.043	< 0.44	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.41 J**	< 0.050	< 0.050
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.30 J**	< 0.10	< 0.10
Fluoranthene	1,000	µg/L	**0.51**	**0.2**	**0.31**	< 0.10	< 19	< 210	**0.31**	**0.17 J**	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	< 1.9	< 10	< 10
Fluorene	1,000	µg/L	**14**	**5.3**	**9.4**	**1.6**	< 19	< 210	**2.6**	**11**	**9.3**	**5.5**	**2.9**	**4.8**	**1.6 J**	**1.5 J**	**3.0**	**16 J**	< 10
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 19	< 210	< 0.10	< 0.095	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.27 J**	< 0.050	< 0.050
Naphthalene	20	µg/L	**2,800**	**770**	**2,500**	**460**	**770**	**1600**	**3,100**	**1,300**	**980**	**630**	**550**	**560**	**310**	**310**	**380**	**3,900 J**	**330**
Phenanthrene	10	µg/L	**12**	**4.4**	**6.6**	**0.067**	< 19	< 210	**9.2**	**5.1**	**4.4**	**4.0**	**2.3**	< 2.0	< 9.4	< 9.4	**1.5 J**	**13 J**	< 10
Pyrene	1,000	µg/L	**0.59**	**0.18**	**0.31**	**0.093**	< 19	< 210	**0.32**	**0.20**	< 0.99	< 1.9	<0.19	< 2.0	< 9.4	< 9.4	**0.27 J**	< 10	< 10
Inorganic Compounds																			
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.050	< 0.050
Barium	2	mg/L	**0.364**	**0.347**	**0.441**	**0.475**	**0.45**	**0.50**	**0.57**	**0.42**	**0.45**	**0.41**	**0.38**	**0.35**	**0.32**	**0.32**	**0.29**	**0.437**	**0.236**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	**0.0096**	**0.0108**	**0.0081**	< 0.0050	**0.0029 J**	< 0.0020	**0.0027 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0034 JB**	**0.0025 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0027 J**	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.020	< 0.020
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	< 0.010	< 0.020	< 0.020
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0686**	**0.0890**	**0.161**	**0.111**	**0.056**	**0.063**	**0.063**	**0.063**	**0.15**	**0.16**	**0.24**	**0.04**	**0.26**	**0.27**	**0.20**	**0.311**	**1.78**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-503BR													MW-504BR											
		Sample Date	1/15/2015	7/16/2014	1/13/2014	7/11/2013	1/10/2013	7/26/2012	1/19/2012	7/6/2011	1/19/2011	7/19/2010	1/12/2010	7/29/2009	1/19/2009	1/14/2015	7/16/2014	1/8/2014	7/10/2013	1/10/2013	7/26/2012	1/19/2012	7/7/2011	1/20/2011	7/19/2010	1/12/2010	7/23/2009	1/15/2009
		Unit	During Extraction													During Extraction											
Volatile Organic Compounds																											
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 200	< 100	**13 J**	< 50	< 5.0	< 5000	<2000	< 20000	< 20000	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 1000	< 1000	< 1000	< 2000
Benzene	5	µg/L	**35**	**910**	< 5.0	**180**	**300**	**770 D**	**20**	**1,200**	< 0.25	**5,200**	**1,700**	**13,000**	**26,000**	< 5	**570**	< 5.0	< 5.0	**160**	**51**	**300**	**43**	**120**	**610**	**650**	**950**	**2600**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 0.60	< 6.0	< 0.60	< 250	<100	< 1000	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 50	< 50	< 50	**14 J**
Ethylbenzene	700	µg/L	< 5	**86**	< 5.0	**18**	**44**	**36**	**2.2 J**	**70**	**1.7 J**	**370**	**120**	< 1000	**1,100**	< 5	**130**	< 5.0	< 5.0	**22**	**8.0**	**41**	**8.4**	**4.1 J**	**110**	**110**	**180**	< 100
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 1.0	< 10	< 1.0	< 250	<100	< 1000	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 50	< 50	< 50	**230**
Toluene	1,000	µg/L	**12**	**270**	< 5.0	**77**	< 10	**230**	**8.7**	**410**	**1.1 J**	**2,100**	**620**	**4,600**	**8,500**	< 5	**220**	< 5.0	< 5.0	**49**	**16**	**86**	**16**	**2.8 J**	**260**	**150**	**210**	**150 B**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	**0.22 J**	< 1.3	< 0.13	< 250	<100	< 1000	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 50	< 50	< 50	< 100
Xylenes, total	2,000	µg/L	< 5	**100**	< 5.0	**26**	**22**	**88**	**3.4 J**	**130**	**0.29 J**	**740**	**180**	< 1000	**2,200**	< 5.0	**110**	< 5.0	< 5.0	**23**	**8.4**	**45**	**8.6**	**4.6 J**	**140**	**83**	**110**	**120**
Semivolatile Organic Compounds																											
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	**2.8**	< 20	**0.22**	**2.1**	< 0.099	**9.8**	**2.8**	< 3.8 *	**21 J***	< 0.5	< 0.50	< 0.50	< 0.50	**0.38**	**0.24**	**1.6 J**	**0.35**	**14**	**1.6 J**	< 1.9	**6.4**	**6.0 J**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**0.39**	< 20	**0.20**	**1.9**	< 0.099	**7.3 J**	**2.4**	**8.7**	**66 ***	< 1	< 1.0	< 1.0	< 1.0	**0.31**	< 0.22	**1.2 J**	**0.23**	**0.47**	**2.8**	< 1.9	**9.9**	**3.0 J**
Anthracene	10	µg/L	< 0.050	**0.05**	< 0.050	**0.053**	< 0.20	< 20	< 0.096	**0.24**	< 0.099	< 9.4	< 1.9	< 3.8	< 38 *	< 0.05	**0.25**	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	**0.098 J**	**0.17 J**	< 1.9	< 1.9	< 3.9	< 19
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.098 J**	**0.16 J**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.11 J**	**0.16 J**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 20	**0.15 J**	**0.10 J**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 20	**0.097 J**	**0.21**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	< 0.096	**0.19**	< 0.099	< 9.4	< 1.9	< 3.8	< 38 *	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.075 J**	**0.20**	< 0.045	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.46	< 0.045	< 0.045	< 1.9	< 1.9	< 3.9	< 19
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 20	< 0.096	**0.25**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Fluoranthene	1,000	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 20	**0.14 J**	**0.19**	< 0.099	< 9.4	< 1.9	< 3.8	< 38 *	< 0.1	**0.11**	< 0.10	< 0.10	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Fluorene	1,000	µg/L	< 0.10	**0.36**	< 0.10	**0.28**	**0.98**	< 20	**0.17 J**	**2.3**	< 0.099	**6.6 J**	**2.5**	**5**	**22 J***	< 0.1	**1.2**	< 0.10	< 0.10	**0.27**	**0.22**	**1.2 J**	**0.57**	**2.1**	**1.7 J**	**2.7**	**8.6**	< 19
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 20	< 0.096	**0.20**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Naphthalene	20	µg/L	< 0.5	< 0.50	<0.50	**5.1**	**1.1**	**290 D**	**1.6**	**1.2**	**0.22**	**910**	**64**	**1,300 B**	**3,700**	**0.65**	< 0.50	< 0.50	< 0.50	**12**	< 0.22	**91**	**0.42**	**11**	**120**	< 1.9	**410**	**370 B**
Phenanthrene	10	µg/L	< 0.05	**0.23**	< 0.050	**0.18**	**0.99**	< 20	**0.13 J**	**1.3**	< 0.099	**6.1 J**	**2.4**	**4.9**	**21 J***	**0.088**	**1.3**	**0.056**	< 0.050	**0.24**	< 0.22	**1.0 J**	**0.40**	**0.18 J***	**1.7 J**	**2.1**	**8**	< 19
Pyrene	1,000	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 20	**0.21**	**0.26**	< 0.099	< 9.4	< 1.9	< 3.8	< 38	< 0.05	**0.12**	< 0.050	< 0.050	< 0.20	< 0.22	< 0.96	< 0.096	< 0.099	< 1.9	< 1.9	< 3.9	< 19
Inorganic Compounds																											
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010
Barium	2	mg/L	< 0.02	**0.0202**	<0.0200	**0.0214**	**0.071**	**0.046**	**0.034**	**0.058**	**0.031**	**0.19**	**0.14**	**0.32**	**0.35**	**0.184**	**0.155**	**0.105**	**0.126**	**0.18**	**0.19**	**0.26**	**0.25**	**1.0**	**0.36**	**0.36**	**0.41**	**0.26**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00024 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00029 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.005	< 0.0050	< 0.0050	**0.0103**	< 0.0050	< 0.0050	< 0.0020	< 0.0020	**0.0043 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0014 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0030 J**	**0.0030 J**	**0.011 JB**	**0.0028 J**	< 0.020	< 0.020	< 0.020	< 0.01	< 0.0100	< 0.0100	**0.0110**	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0031 JB**	**0.0027 J**	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.012**	**0.011**	< 0.010	< 0.010	< 0.010	< 0.010	**0.021**	**0.013**	< 0.010	< 0.010	< 0.010	< 0.010	**0.013**	**0.0099 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	**0.00078**	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0026 J**	**0.0024 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0025 J**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010
Thallium	0.002	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0020 J**
Zinc	2	mg/L	**0.0378**	< 0.0200	**0.0365**	**0.0641**	**0.069**	< 0.020	**0.024**	**0.051**	**0.066**	**0.036**	**0.089**	< 0.020	< 0.020	**0.121**	**0.0429**	**0.248**	**0.327**	**0.029**	**0.027**	**0.0097 J**	**0.015 J**	< 0.0087	**0.024**	< 0.020	< 0.020	< 0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-506BR - DESTROYED								MW-507BR												
		Sample Date	7/26/2012	1/25/2012	7/5/2011	1/19/2011	7/13/2010	1/7/2010	7/28/2009	1/15/2009	1/15/2015	7/17/2014	1/13/2014	7/11/2013	1/10/2013	7/26/2012	1/19/2012	7/6/2011	1/19/2011	7/13/2010	1/7/2010	7/28/2009	1/15/2009
		Unit	During Extraction								During Extraction												
Volatile Organic Compounds																							
Acetone	4,000	µg/L	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100
Benzene	5	µg/L	< 5.0	**0.29 J**	< 0.25	**0.97 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.25	< 0.25	**0.80 J**	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Disulfide	4,000	µg/L	< 5.0	< 0.60	< 0.60 *	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	**26**	**27**	**13**
Ethylbenzene	700	µg/L	< 5.0	< 0.11	< 0.11	**1.6 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0
Methylene Chloride	5	µg/L	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	µg/L	< 5.0	< 0.33	< 0.33	**1.3 J**	< 5.0	< 5.0	< 5.0	**0.49 JB**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**1.0 J**	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethylene	5	µg/L	**22**	**25**	**8.3**	**7.2**	**4.3 J**	**7.9**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes, total	2,000	µg/L	< 5.0	**0.24 J**	< 0.20	**0.23 J**	**0.21 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0
Semivolatile Organic Compounds																							
Acenaphthene	2,000	µg/L	**1.5**	**5.6**	**2.3**	**2.1**	**2.7**	**3.4**	**1.7**	**1.5**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Acenaphthylene	10	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	**0.037 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Anthracene	10	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benz(a)anthracene	0.1	µg/L	< 0.19	**0.52**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benzo(a)pyrene	0.2	µg/L	< 0.19	**0.51**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	**0.71 ***	< 0.11	< 0.11	< 0.19 *	< 0.19	< 0.19	< 0.19	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19 *	< 0.19	< 0.19	< 0.19
Benzo(g,h,i)perylene	10	µg/L	< 0.19	**0.50**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Benzo(k)fluoranthene	10	µg/L	< 0.19	**0.71**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Chrysene	0.2	µg/L	< 0.19	**0.61**	< 0.048	< 0.049	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.049	< 0.049	< 0.046	< 0.19	< 0.19	< 0.19	< 0.19
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	**0.66**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.1	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Fluoranthene	1,000	µg/L	< 0.19	**0.12 J**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Fluorene	1,000	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	**0.56**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	0.072	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Naphthalene	20	µg/L	< 0.19	**0.47**	**0.21**	**0.54**	< 0.19	< 0.19	< 0.19	**0.11 JB**	< 0.50	< 0.50	**1.4**	< 0.50	< 0.19	< 0.19	< 0.11	**0.20 J**	**0.22**	< 0.19	< 0.19	< 0.19	< 0.19
Phenanthrene	10	µg/L	< 0.19	< 0.097	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Pyrene	1,000	µg/L	< 0.19	**0.15 J**	< 0.11	< 0.11	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 0.19	< 0.11	< 0.11	< 0.10	< 0.19	< 0.19	< 0.19	< 0.19
Inorganic Compounds																							
Antimony	0.01	mg/L	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010
Barium	2	mg/L	**0.45**	**0.40**	**0.29**	**0.37**	**0.32**	**0.45**	**0.38**	**0.075**	**0.0698**	**0.0618**	**0.0697**	**0.0798**	**0.22**	**0.20**	**0.078**	**0.073**	**0.19**	**0.087**	**0.30**	**0.31**	**0.29**
Beryllium	0.004	mg/L	< 0.0040	< 0.00020	< 0.00020	**0.00026 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00036 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.010	< 0.0012	**0.011**	**0.019**	**0.025**	**0.025**	**0.035**	**0.051**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0012 J**	< 0.010	< 0.010	< 0.010	**0.0015 J**
Copper	1.3	mg/L	< 0.020	< 0.0019	< 0.0019	**0.0051 JB**	**0.0059 J**	< 0.020	< 0.020	**0.012 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0044 JB**	**0.0032 J**	< 0.020	< 0.020	**0.0028 J**
Cyanide	0.2	mg/L	< 0.010	< 0.0050	**0.012**	< 0.0050	< 0.010	< 0.010	< 0.010	**0.0051 J**	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0076 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.040	< 0.0023	**0.0025 J**	< 0.0023	< 0.040	< 0.040	< 0.040	**0.0035 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040
Selenium	0.05	mg/L	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	**0.010 J**	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010
Thallium	0.002	mg/L	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.010	**0.0041 J**	**0.0048 J**	**0.0064 J**	**0.0066 J**	< 0.010	< 0.010	0.01	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0028 J**	**0.0033 J**	**0.0037 J**	**0.0030 J**	< 0.010	< 0.010	**0.0025 J**
Zinc	2	mg/L	< 0.020	< 0.0087	< 0.0087	**0.0097 J**	< 0.020	< 0.020	< 0.020	**0.011 J**	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.0090 J**	**0.019 J**	**0.03**	< 0.020	**0.017 J**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-508BR													MW-509BR												
		Sample Date	1/15/2015	7/17/2014	1/14/2014	7/10/2013	1/8/2013	7/25/2012	1/19/2012	7/6/2011	1/19/2011	7/13/2010	1/7/2010	7/28/2009	1/15/2009	1/15/2015	7/17/2014	1/13/2014	7/11/2013	1/10/2013	7/26/2012	1/19/2012	7/7/2011	1/19/2011	7/15/2010	1/11/2010	7/29/2009	1/15/2009
		Unit	During Extraction													During Extraction												
Volatile Organic Compounds																												
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	**11 J**	< 5.0	< 100	< 100	< 100	**50 J**	< 50	< 2500	< 50	< 50	< 2,000	< 2,000	< 50	< 50	< 100	< 2000	< 5000	< 5000	< 10000
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.34 J**	**0.38 J**	**0.68 J**	**0.43 J**	< 5.0	< 5.0	**0.37 J**	**2500**	**7400**	< 5.0	**2,800**	**2,600**	**1,100**	**3,500**	**880**	**2,800**	**1,500**	**5,400**	**4,900**	**7,600**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	**7.5**	< 5.0	< 250	< 5.0	< 5.0	< 100	< 100	< 6.0	< 6.0	< 12	< 100	< 250	< 250	< 500
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.11	< 0.11	< 0.11	< 5.0	< 5.0	< 5.0	< 5.0	**260**	**910**	< 5.0	**440**	**310**	**120**	**360**	**59**	**240**	**76 J**	**460**	**370**	< 500
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**2.9 J**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 5.0	< 5.0	< 100	< 100	< 10	< 10	< 20	< 100	< 250	< 250	**710**
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	**1.0 J**	< 5.0	< 5.0	< 5.0	**0.37 JB**	**460**	< 250	< 5.0	**78**	**600**	**210**	**830**	**360**	**950**	**490**	**2,300**	**1,900**	**1,900 B**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 5.0	< 5.0	< 100	< 100	< 1.3	< 1.3	< 2.6	< 100	< 250	< 250	< 500
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	**160**	< 250	< 5.0	**150**	**230**	< 100	**300**	**84**	**360**	**170**	**970**	**710**	**1,000**
Semivolatile Organic Compounds																												
Acenaphthene	2,000	µg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	**0.025 J**	**16**	**12**	< 0.50	< 50	< 20	< 20	**42 D**	**1.1**	**13**	< 19	**21**	**15 ***	**30 J**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	**0.31**	< 0.19	**0.34**	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	**0.022 J**	**8**	**2.2**	< 1.0	**2.8**	< 20	< 20	**49 D**	**0.36**	**16**	< 19	**41**	**29**	**30 J**
Anthracene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**0.91**	**0.7**	< 0.050	**0.86**	< 20	< 20	**4.0 J D**	**0.54**	**1.2 J**	< 19	< 19	< 1.9	< 38
Benz(a)anthracene	0.1	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(a)pyrene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(b)fluoranthene	0.2	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19 *	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Chrysene	0.2	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.046	< 0.048	< 0.043	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 0.96	< 0.043	< 0.48	< 19	< 19	< 1.9	< 38
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	< 0.10	< 0.10	< 0.10	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**0.45**	**0.32**	< 0.10	**0.52**	< 20	< 20	< 2.1	**0.28**	< 1.1	< 19	< 19	< 1.9	< 38
Fluorene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**6.5**	**4.4**	< 0.10	**5.1**	< 20	< 20	**31 D**	**2.6**	**12**	< 19	**21**	**14**	**16 J**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.067**	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	< 0.050	< 0.050	< 0.050	< 20	< 20	< 2.1	< 0.095	< 1.1	< 19	< 19	< 1.9	< 38
Naphthalene	20	µg/L	< 0.5	< 0.50	<0.50	**1.6**	< 0.20	**0.59**	**0.24**	**0.52**	**0.099 J**	**0.44**	< 0.19	< 0.19	**0.096 J**	**810**	**290**	**1.1**	**830**	**610**	**300**	**2,700 D**	< 0.095	**750**	**320**	**2,900**	**1,100 B**	**2,400 B**
Phenanthrene	10	µg/L	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**7.9**	**5.2**	< 0.050	**6.3**	< 20	< 20	**34 D**	**3.5**	**11**	< 19	**21**	**14**	**17 J**
Pyrene	1,000	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.19	< 0.10	< 0.11	< 0.096	< 0.19	< 0.19	< 0.19	< 0.19	**0.52**	**0.35**	< 0.050	**0.49**	< 20	< 20	< 2.1	**0.30**	< 1.1	< 19	< 19	< 1.9	< 38
Inorganic Compounds																												
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010
Barium	2	mg/L	**0.614**	**0.566**	**0.708**	**0.650**	**0.68**	**0.72**	**0.68**	**0.77**	**0.66**	**0.66**	**0.27**	**0.64**	**1.3**	**0.128**	**0.419**	**0.0262**	**0.157**	**0.26**	**0.30**	**0.25**	**0.082**	**0.38**	**0.27**	**0.75**	**0.6**	**0.95**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00025 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	**0.0058**	**0.0091**	**0.0053**	**0.0062**	**0.0033 J**	**0.0081**	**0.0029 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	**0.0137**	**0.0216**	**0.0179**	**0.0101**	< 0.010	< 0.010	**0.0017J**	**0.0031 J**	**0.0021 J**	**0.0013 J**	< 0.010	< 0.010	**0.0064 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0012 J**	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0021 J**	**0.0024 J**	**0.0044 JB**	< 0.020	< 0.020	< 0.020	**0.0038 J**	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	**0.0030 J**	**0.0043 JB**	< 0.020	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0056 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0054 J**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0055 J**	**0.0055 J**	**0.0065 J**	**0.0066 J**	< 0.040	< 0.040	**0.0035 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.0038 J**	**0.0048 J**	**0.0046 J**	**0.0052 J**	< 0.040	< 0.040	**0.0038 J**
Selenium	0.05	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0086 J**	**0.0067 J**	**0.0068 J**	**0.0045 J**	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	**0.0029 J**
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	< 0.020	**0.109**	**0.0395**	**0.258**	**0.183**	**0.12**	**0.11**	**0.072**	**0.17**	**0.087**	**0.019 J**	**0.023**	**0.021**	**0.017 J**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-510BR													MW-511BR													
		Sample Date	1/14/2015	7/16/2014	1/9/2014	7/11/2013	07/13 DUP	1/10/2013	7/24/2012	1/23/2012	7/6/2011	1/19/2011	7/20/2010	1/11/2010	7/29/2009	1/19/2009	1/14/2015	7/15/2014	7/14 DUP	1/9/2014	7/11/2013	1/10/2013	7/26/2012	1/25/2012	7/6/2011	1/20/2011	7/20/2010	1/12/2010	7/29/2009	1/19/2009	01/09 DUP
		Unit	During Extraction														During Extraction													
Volatile Organic Compounds																														
Acetone	4,000	µg/L	< 50	< 50	<50	< 2,500	< 2,500	< 500	< 10,000	< 100	< 100	< 100	**19 J**	< 200	< 10000	< 20000	< 50	< 50	< 50	<50	**85**	< 2,000	< 2,000	< 250	560 J	< 250	**350**	< 10000	< 10000	< 10000	< 10000
Benzene	5	µg/L	**1,100**	**25**	**32**	**22,000**	**6,300**	**370**	**7,800**	**5,400**	**1,500**	**2,100**	**2300**	**96**	**4400**	**35000**	**450**	**670**	**590**	**2,500**	**1,200**	**3,400**	**1,900**	**4,000**	**3,600**	**6,100**	**3600**	**8,800**	**10,000**	**8,700**	**10,000**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	<5.0	< 250	< 250	< 25	< 500	< 12	< 12	< 12	< 10	<10	< 500	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 30	< 30	< 30	< 5.0	< 500	< 500	160 J	99 J
Ethylbenzene	700	µg/L	**180**	**20**	**47**	**1,200**	**310**	**160**	**1200**	**590**	**230**	**630**	**660**	<10	< 500	**760 J**	**17**	**55**	**59**	**180**	**150**	**200**	**120**	**220 J**	**190 J**	**420**	**200**	**710**	**830**	**870**	**1,000**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	<5.0	< 250	< 250	< 25	< 500	< 20	< 20	< 20	< 10	**50**	< 500	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 50	< 50	< 50	< 5.0	< 500	< 500	< 500	< 500
Toluene	1,000	µg/L	**190**	**30**	**52**	**10,000**	**2,900**	**350**	**4,700**	**2,600**	**1,100**	**1,200**	**1500**	**160**	**5500**	**19000**	**35**	**75**	**88**	**850**	**410**	**1,100**	**630**	**1,200**	**1,000**	**1,800**	**1200**	**2,300**	**2,500**	**1,200**	**1,400**
Trichloroethylene	5	µg/L	< 5.0	< 5.0	<5.0	< 250	< 250	< 25	< 500	< 2.6	< 2.6	< 2.6	< 10	< 10	< 500	< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 100	< 100	< 6.5	< 6.5	< 6.5	< 5.0	< 500	< 500	< 500	< 500
Xylenes, total	2,000	µg/L	**200**	**24**	**66**	**690**	**690**	**230**	**1,500**	**930**	**520**	**1,100**	**940**	**360**	**3500**	**5200**	**12**	**35**	**40**	**250**	**190**	**280**	**160**	**350**	**310**	**650**	**400**	**940**	**1000**	**810**	**900**
Semivolatile Organic Compounds																														
Acenaphthene	2,000	µg/L	**7.8**	< 0.50	**4.8**	**53**	**15**	**21**	< 190	**39**	**120**	**37**	**16**	**9.3**	**11 ***	**12 J**	**3.3**	**1.8**	**1.8**	**3.5**	**5.2**	**5.0**	**4.6**	**8.4**	**4.2**	**16**	**6.1**	**9.1**	**21 ***	**31 J***	**23 J***
Acenaphthylene	10	µg/L	**2.7**	< 1.0	<1.0	< 100	**5.1**	< 19	< 190	**110**	**670**	**32**	**170**	**120**	**170**	**150**	< 1	< 1.0	< 1.0	**1.1**	**1.3**	< 2.1	< 4.3	**2.6**	**0.98 J**	**8.7**	**4.0**	**5.9**	**11**	**5.5 J***	**5.0 J***
Anthracene	10	µg/L	**0.86**	**0.31**	**0.78**	**5.8**	**3.0**	< 19	< 190	< 11	**220**	< 9.6	**24**	**8.5**	< 9.7	< 94	**0.081**	**0.081**	**0.097**	**0.42**	**0.35**	< 2.1	< 4.3	< 1.0	< 0.94	**1.3 J**	< 1.9	< 1.9	< 3.9	< 38 *	< 38 *
Benz(a)anthracene	0.1	µg/L	**0.17**	**0.11**	**0.12**	**0.76**	**1.2**	< 19	< 190	< 11	**190**	< 9.6	**13**	**5.1**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(a)pyrene	0.2	µg/L	**0.13**	**0.096**	**0.07**	**0.52**	**1.1**	< 19	< 190	< 11	**160**	< 9.6	**11**	**4**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(b)fluoranthene	0.2	µg/L	**0.13**	< 0.10	<0.010	**0.42**	**0.89**	< 19	< 190	< 11	< 5.1	< 9.6	**4.4**	**1.7**	< 9.7	< 94	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 2.1	< 4.3	< 1.0 *	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(g,h,i)perylene	10	µg/L	< 0.1	< 0.10	<0.10	**0.18**	**0.58**	< 19	< 190	< 11	**54**	< 9.6	**3.8**	**1.5**	< 9.7	< 94	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Benzo(k)fluoranthene	10	µg/L	< 0.05	< 0.050	<0.050	**0.16**	**0.36**	< 19	< 190	< 11	**110**	< 9.6	**7.1**	**2.2**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38 *	< 38 *
Chrysene	0.2	µg/L	**0.14**	**0.095**	**0.081**	**0.68**	**1.0**	< 19	< 190	< 5.1	**140**	< 4.3	**11**	**3.6**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 0.47	< 0.42	< 0.45	< 1.9	< 1.9	< 3.9	< 38	< 38
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.1	< 0.10	< 0.10	< 0.10	**0.10**	< 19	< 190	< 11	**16**	< 9.6	< 1.9	**0.46**	< 9.7	< 94	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Fluoranthene	1,000	µg/L	**0.78**	**0.44**	**0.81**	**4.0**	**3.1**	< 19	< 190	< 11	**330**	< 9.6	**26**	**10**	< 9.7	< 94	< 0.1	< 0.10	< 0.10	**0.15**	**0.17**	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38 *	< 38 *
Fluorene	1,000	µg/L	**4.7**	**0.61**	**4.7**	**42**	**14**	< 19	< 190	**39**	**590**	**30**	**67**	**43**	**44**	**31 J**	**0.89**	**0.84**	**0.83**	**2.3**	**3.5**	**3.9**	**4.4**	**7.0**	**3.7**	**13**	**5.0**	**4.2**	**7.8**	**6.8 J***	< 38 *
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.058**	< 0.050	<0.050	**0.15**	**0.45**	< 19	< 190	< 11	**50**	< 9.6	**4.1**	**1.8**	< 9.7	< 94	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Naphthalene	20	µg/L	**300**	**0.64**	<0.50	**2,400**	**0.65**	**680**	**3,600**	**4,700 D**	**6,000**	**3,700**	**1400**	**2100**	**6600 B**	**6900**	**150**	**75**	**85**	**390**	**260**	**180**	**120**	**310 D**	**26**	**12,000**	**490**	**1,700**	**2,600 B**	**1,800**	**1,300**
Phenanthrene	10	µg/L	**5.6**	**0.66**	**0.96**	**47**	**17**	< 19	< 190	**37**	**1,000**	**27**	**120**	**56**	**41**	**32 J**	**0.76**	**0.7**	**0.73**	**2.5**	**2.3**	**3.4**	< 4.3	**7.6**	**5.0**	**12 ***	**6.4**	**3.8**	**5.9**	< 38 *	< 38 *
Pyrene	1,000	µg/L	**0.97**	**0.45**	**0.89**	**4.4**	**3.9**	< 19	< 190	< 11	**530**	< 9.6	**44**	**12**	**11**	< 94	**0.055**	**0.051**	**0.054**	**0.15**	**0.19**	< 2.1	< 4.3	< 1.0	< 0.94	< 1.0	< 1.9	< 1.9	< 3.9	< 38	< 38
Inorganic Compounds																														
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010
Barium	2	mg/L	**0.109**	**0.0515**	<0.0200	**0.326**	**0.130**	**0.049**	**0.29**	**0.28**	**0.23**	**0.22**	**0.22**	**0.067**	**0.14**	**0.17**	**0.0678**	**0.0609**	**0.0598**	**0.256**	**0.268**	**0.30**	**0.33**	**0.41**	**0.40**	**0.47**	**0.52**	**0.56**	**0.26**	**0.15**	**0.14**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cadmium	0.005	mg/L	< 0.005	< 0.0050	**0.0089**	**0.0063**	**0.0298**	**0.0062**	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium	0.1	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	**0.0019 J**	**0.0012 J**	< 0.010	< 0.010	**0.0047 J**	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0012 J**	**0.0016 J**	< 0.0012	**0.0014 J**	< 0.010	< 0.010	< 0.010	< 0.010
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	**0.0026 J**	< 0.0019	**0.0044 JB**	**0.0020 J**	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0037 JB**	**0.0030 J**	< 0.020	< 0.020	< 0.020	< 0.020
Cyanide	0.2	mg/L	< 0.01	**0.012**	< 0.010	< 0.010	**0.014**	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	**0.0052 J**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	**0.013 J**	**0.0012 J**	**0.0094 J**	**0.011 J**	< 0.040	< 0.040	**0.0046 J**	**0.0055 J**
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Vanadium (fume or dust)	0.2	mg/L	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	**0.0030 J**	< 0.0024	**0.0030 J**	< 0.010	< 0.010	< 0.010	**0.0040 J**	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Zinc	2	mg/L	**0.0939**	**0.0623**	**0.165**	**0.124**	**0.573**	**0.14**	**0.028**	**0.015 J**	**0.016 J**	**0.11**	**0.13**	<0.020	**0.12**	**0.012 J**	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	< 0.0087	< 0.020	< 0.020	< 0.020	0.028	< 0.020

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Appendix E-2
Summary of Historical Groundwater Sampling Data - Transition Zone and Bedrock Monitoring Wells
January 2001 through January 2015
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Georgia

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-512BR														MW-513BR								
		Sample Date	1/14/2015	7/17/2014	1/14/2014	7/11/2013	1/10/2013	7/26/2012	1/25/2012	7/7/2011	1/20/2011	07/10 DUP	7/20/2010	1/12/2010	7/29/2009	1/19/2009	1/14/2015	7/16/2014	1/8/2014	7/11/2013	1/9/2013	7/24/2012	2/6/2012	7/7/2011	1/18/2011
		Unit	During Extraction														During Extraction								
Volatile Organic Compounds																									
Acetone	4,000	µg/L	< 50	< 50	< 50	< 50	< 500	< 500	< 5.0	< 5.0	< 5.0	**44 J**	**52 J**	< 2000	< 2000	< 2000	< 50	< 50	< 50	< 50	< 100	< 100	< 5.0	< 5.0	< 5.0
Benzene	5	µg/L	< 5.0	**12**	**5.2**	**85**	**150**	**1,300 D**	**40**	**1,500**	**63**	**200**	**200**	**3,500**	**1,900**	**2,300**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**2.1 J**	**0.49 J**	**30**
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 0.60	< 0.60	< 0.60	< 10	< 10	< 100	< 100	18 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.60	< 0.60	< 0.60
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	**8.4**	< 25	**8.4**	**20**	**1.8 J**	**24**	**24**	**560**	**250**	**250**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.25 J**	< 0.11	**3.0 J**
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 1.0	< 1.0	< 1.0	< 10	< 10	< 100	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 0.33	**3.4 J**	< 0.33	**1.0 J**	**0.91 J**	< 100	< 100	**130**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.33	< 0.33	< 0.33
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 0.13	< 0.13	< 0.13	< 10	< 10	< 100	< 100	< 100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.31 J**	< 0.13	**0.35 J**
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	**1.4 J**	**34**	**3.3 J**	**7.5 J**	**7.3 J**	**200**	**110**	**160**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**0.33 J**	< 0.20	**1.4 J**
Semivolatile Organic Compounds																									
Acenaphthene	2,000	µg/L	**2.5**	**3**	**0.95**	**1.7**	**1.2**	< 19	**2.4**	**12**	**2.4**	**0.77**	**1.7**	**26**	**10 ***	**6.8 J***	**1.3**	**1.8**	< 0.50	**2.4**	**2.5**	**2.9**	**6.9**	**0.16 J**	**4.1**
Acenaphthylene	10	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 0.19	< 19	**0.16 J**	< 0.99	**0.39**	**0.13 J**	**0.55**	**2.7**	**3.5**	**4.0 J***	< 1	< 1.0	< 1.0	< 1.0	< 0.20	< 0.20	**0.16 J**	< 0.097	< 0.095
Anthracene	10	µg/L	**0.051**	**0.088**	**0.072**	**0.066**	< 0.19	< 19	**0.11 J**	< 0.99	< 0.096	< 0.19	**0.11 J**	< 1.9	< 0.94	< 19 *	**0.082**	**0.068**	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benz(a)anthracene	0.1	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(a)pyrene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(b)fluoranthene	0.2	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	< 0.11 *	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(g,h,i)perylene	10	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Benzo(k)fluoranthene	10	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19 *	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Chrysene	0.2	µg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.049	< 0.44	< 0.043	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.049	< 0.043	< 0.043
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Fluoranthene	1,000	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.19	< 19	**0.14 J**	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19 *	< 0.1	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Fluorene	1,000	µg/L	**0.28**	**0.37**	**0.22**	**0.30**	< 0.19	< 19	**0.57**	**2.7**	**0.41**	**0.41**	**0.79**	**5.2**	**3.1**	< 19 *	< 0.10	< 0.10	< 0.10	**0.19**	< 0.20	< 0.20	**0.40**	< 0.097	**0.28**
Indeno(1,2,3-cd)pyrene	0.4	µg/L	**0.081**	< 0.050	< 0.050	< 0.050	< 0.19	< 19	< 0.11	< 0.99	< 0.096	< 0.19	< 0.19	< 1.9	< 0.94	< 19	< 0.050	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Naphthalene	20	µg/L	< 0.50	**3.7**	<0.50	**7.4**	**15**	**320**	**0.84**	**320**	**12**	< 0.19	< 0.19	**810**	**370 B**	**350**	< 0.5	< 0.50	< 0.50	**1.9**	**2.6**	< 0.20	**2.2**	**0.30**	**4.4**
Phenanthrene	10	µg/L	< 0.050	**0.27**	**0.44**	**0.41**	< 0.19	< 19	**0.71**	**1.6 J**	**0.23 ***	**0.56**	**0.82**	**4.9**	**3.0**	< 19 *	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	< 0.11	< 0.097	< 0.095
Pyrene	1,000	µg/L	< 0.050	< 0.050	**0.11**	**0.075**	< 0.19	< 19	**0.18 J**	< 0.99	< 0.096	< 0.19	**0.11 J**	< 1.9	< 0.94	< 19	< 0.05	< 0.050	< 0.050	< 0.050	< 0.20	< 0.20	**0.11 J**	< 0.097	< 0.095
Inorganic Compounds																									
Antimony	0.01	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0053	< 0.0053	< 0.0053
Arsenic	0.05	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.020	< 0.020	< 0.0046	< 0.0046	< 0.0046
Barium	2	mg/L	**0.154**	**0.192**	**0.256**	**0.171**	**0.13**	**0.23**	**0.13**	**0.24**	**0.11**	**0.062**	**0.064**	**0.15**	**0.079**	**0.22**	**0.711**	**0.635**	**0.115**	**0.749**	**0.72**	**0.79**	**0.74**	**0.15**	**0.61**
Beryllium	0.004	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	**0.00027 JB**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0040	< 0.0040	< 0.00020	< 0.00020	< 0.00020
Cadmium	0.005	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020	< 0.0020	< 0.0020
Chromium	0.1	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	< 0.0012	< 0.0012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0012	**0.0025 J**	**0.0013 J**
Copper	1.3	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	**0.0027 JB**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.020	< 0.020	< 0.0019	< 0.0019	< 0.0019
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	**0.0068 J**	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050
Lead	0.015	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0040	< 0.0040	< 0.0040
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.000091	< 0.000091	< 0.000091
Nickel	0.1	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	< 0.0023	< 0.0023	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.040	< 0.040	< 0.0023	**0.0028 J**	< 0.0023
Selenium	0.05	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	< 0.020	< 0.010	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0064	< 0.0064	< 0.0064
Thallium	0.002	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0010	< 0.0010	< 0.00025	< 0.00025	< 0.00025
Vanadium (fume or dust)	0.2	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.0024	< 0.0024	< 0.0024	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	**0.0108**	< 0.0100	< 0.010	< 0.010	< 0.0024	**0.012**	< 0.0024
Zinc	2	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	< 0.0087	**0.0095 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.0224**	< 0.0200	< 0.0200	< 0.0200	< 0.020	< 0.020	< 0.0087	**0.030**	< 0.0087

Notes:
-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded for sample
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank

Summary of Historical Groundwater Sampling Data – Decommissioned Monitoring Wells

Appendix E3

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	CP-01				MW-04																
		Sample Date	1/18/2002	1/18/2002	7/12/2001	1/17/2001	01/13/2009	7/15/2008	1/10/2008	8/21/2007**	7/11/2007	2/13/2007	7/11/2006	1/15/2006	7/21/2005	7/16/2004	1/22/2004	7/20/2003	7/03 DUP	1/20/2003	7/9/2002	1/17/2002	7/11/2001	1/18/2001
		Unit	Pre-ISCO				Post-ISCO								Pre-ISCO									
Volatile Organic Compounds																								
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 UJ	< 100 U	< 100	< 50	< 50	--	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**17 J**	25 U
Benzene	0.005	mg/L	**0.0014**	**0.0013**	**0.0087**	**0.0037**	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.21 J**	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.29 J**	5.0 U
Ethylbenzene	0.7	mg/L	**0.00024 J**	**0.00024 J**	**0.00036 J**	0.00041 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1	mg/L	**0.00028 J**	**0.00029 J**	**0.00033 J**	**0.00032 J**	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.48 J**	1.0 U	1.0 U	1.0 U
Xylenes, total	2	mg/L	**0.0026**	**0.003**	**0.0038**	**0.0042**	< 5.0 U	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																								
2-Methylnaphthalene	*	mg/L	**0.078 J**	**0.072 J**	**0.066**	**0.11**	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2	mg/L	**0.056**	**0.055**	**0.064**	**0.086**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	0.0002	mg/L	**0.0021 J**	**0.0022 J**	**0.0018 J**	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	**0.00037 J**	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.10	--	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	DL	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	DL	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.10	--	<0.10	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	0.001	mg/L	**0.0069 J**	**0.0072 J**	**0.0073 J**	**0.012**	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1	mg/L	**0.0016 J**	**0.0019 J**	**0.002 J**	**0.005 J**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1	mg/L	**0.019**	**0.018**	**0.02**	**0.032**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.19 U	< 0.19	<0.050	--	<0.050	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	**0.0013 J**	0.01 U	0.027 J	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	mg/L	**0.018**	**0.017**	**0.02**	**0.028**	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1	mg/L	**0.0013 J**	**0.0017 J**	**0.0027 J**	**0.0038 J**	0.022 J	0.095 J	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																								
Aluminum (fume or dust)	*	mg/L	0.041 U	0.035 U	0.2 U	**0.13 J**	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.37**	0.2 U	**0.034 B**	**0.059 B**	**0.093 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	< 0.020 U	< 0.020	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0057 B**
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	**0.0069 J**	< 0.010 U	< 0.010	<0.0500	--	<0.050	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0045 B**	**0.0053 B**	0.01 U
Barium	2	mg/L	**0.32**	**0.32**	**0.27**	**0.32**	0.038	**0.14**	**0.0428**	--	**0.0727**	**0.0479**	**0.0509**	0.2 U	**0.0907**	**0.13**	**0.077**	**0.07**	**0.07**	**0.084**	**0.073**	**0.091**	**0.1**	**0.12**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.00072 U	< 0.0040 U	< 0.0040	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.00073 B**	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	< 0.0050 U	< 0.0050	< 0.0050	--	< 0.0050	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**170**	**170**	**140**	**160**	--	--	--	--	--	--	--	**9.98**	**8.04**	**34**	**17**	**17**	**18**	**16**	**17**	**19**	**18**	**20**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.010 U	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	**0.0014 J**	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.0015 U	0.0017 U	0.02 U	**0.0068 J**	0.0026 J	0.0022 J	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0021 B**	0.02 U	0.02 U	0.02 UN	**0.00096 B**
Cyanide	0.2	mg/L	**0.27**	**0.32**	**0.16**	**0.33**	< 0.010 U	0.0067 J	< 0.010	--	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	**0.019**	0.01 U	0.015 U	0.015 U	0.01 U	**0.0055 J**	**0.0076 B**	**0.0082 B**	**0.0057 B**
Iron	*	mg/L	**12**	**12**	**11**	**15**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	0.005 U	0.0024 U	0.005 U	0.0045 U	< 0.0050 U	< 0.0050	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0016 B**	0.005 U	0.005 U	**0.0018 B**	0.005 U
Magnesium	*	mg/L	**19**	**19**	**15**	**18**	--	--	--	--	--	--	--	5 U	**2.54**	**6.1**	**2.1**	**2.4**	**2.5**	**1.9**	**1.6**	**2**	**1.8**	**2.1**
Manganese	*	mg/L	**0.86**	**0.86**	**0.74**	**0.88**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00012 J	< 0.00020	< 0.00020	--	< 0.00020	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000098 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	< 0.040 U	< 0.040	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**7.4**	**7.5**	**7.1**	**7.9**	--	--	--	--	--	--	--	5 U	**1.75**	**5.8**	**4.3**	**4.1**	**4.4**	**3.9**	**4.2**	**4.5 N**	**5.9**	**4.0**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.010 U	< 0.010	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**8.7**	**9.1**	**7.9**	**9.4**	--	--	--	--	--	--	--	**12.6**	**12.9**	**5**	**2.5**	**4.9**	**5**	**3.6**	**2.5**	**2.9**	**3.4**	**3.8**
Thallium	0.002	mg/L	0.002 UW	0.002 UJ	0.002 UW	0.002 U	< 0.0010 U	< 0.0010	< 1.00	--	< 1.00	< 0.01	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UWN	0.002 UJ	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	< 0.010 U	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.008 U	0.013 J	**0.061**	< 0.0200	--	< 0.020	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.03**	**0.0091 B**	**0.0065 J**	**0.011 B**	**0.014 B**	**0.021**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-06			MW-07							MW-08				MW-09			MW-10		
		Sample Date	1/21/2002	7/12/2001	1/23/2001	4/4/2002	3/8/2002	3/8/2002	1/21/2002	7/12/2001	7/12/2001	1/16/2001	4/4/2002	1/22/2002	7/16/2001	1/16/2001	1/22/2002	7/16/2001	1/23/2001	1/21/2002	7/12/2001	1/17/2001
		Unit	Pre-ISCO			Pre-ISCO							Pre-ISCO				Pre-ISCO			Pre-ISCO		
Volatile Organic Compounds																						
Acetone	4	mg/L	2.5 U	5 U	0.25 U	--	--	0.025 U	0.12 U	**0.016 J**	**0.019 J**	0.025 UJ	--	2.5 U	2.5 U	0.62 U	5 U	**0.085 J**	0.025 U	**0.024 J**	0.025 U	0.025 U
Benzene	0.005	mg/L	**21 D**	**15**	**18 D**	**0.012**	--	**0.00042 J**	**1.8 D**	**0.75 D**	**0.62 D**	**0.15**	**11**	**25 D**	**15**	**17 D**	**23**	**23 D**	**2.4 D**	**0.68 D**	**1.1 D**	**0.0024**
Carbon Disulfide	4	mg/L	0.1 U	0.2 U	0.01 U	--	--	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	--	0.1 U	0.1 U	0.025 U	0.2 U	0.005 U	0.001 U	0.001 U	0.001 U	**0.0028**
Dichloromethane	0.005	mg/L	0.5 U	1 U	0.05 U	0.005 U	--	0.005 U	0.025 U	0.005 U	0.005 U	0.005 U	0.5 U	0.5 U	0.5 U	0.12 U	1 U	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	**4.8**	**4.5**	**5.5 D**	**0.00065 J**	--	0.001 U	**0.56**	**0.3 D**	**0.24 D**	**0.07**	**2.3**	**4.5**	**3.8**	**4.7**	**3.9**	**3.5 D**	**1.2 D**	**0.0019**	**0.017**	**0.00012 J**
Toluene	1	mg/L	**3.7**	**3.3**	**6.4 D**	**0.0024**	--	0.001 U	**0.17**	**0.062**	**0.066**	**0.017**	**0.58**	**2.8**	**0.56**	**2.3**	**11**	**16 D**	**0.54 D**	0.001 U	**0.00054 J**	0.001 U
Trichloroethylene	0.005	mg/L	0.1 U	0.2 U	0.01 U	0.001 U	--	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	**0.085 J**	0.1 U	0.1 U	0.025 U	0.2 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	**3.7**	**3.7**	**4.5**	--	--	0.002 U	**0.39**	**0.15**	**0.16**	**0.062**	--	**3.6**	**3.2**	**4.4**	**3.7**	**5.8 D**	**0.73 D**	**0.0083**	**0.015**	**0.0033**
Semivolatile Organic Compounds																						
2-Methylnaphthalene	*	mg/L	**0.67 D**	**0.77**	**1**	--	--	**0.0011 J**	**0.11**	**0.035**	**0.038**	**0.019**	--	**0.66**	**0.53**	**0.61**	**0.77**	**0.86**	**0.58**	**0.056**	**0.062**	**0.03**
Acenaphthene	2	mg/L	**0.072**	**0.11 J**	**0.1**	**0.0088 J**	--	**0.0012 J**	**0.029 J**	**0.021**	**0.022**	**0.016**	**0.12**	**0.12**	**0.1**	**0.11**	**0.039 J**	**0.075**	**0.063**	**0.052**	**0.068**	**0.048**
Acenaphthylene	0.0002	mg/L	**0.057**	**0.085 J**	**0.18**	**0.007 J**	--	**0.0015 J**	**0.046 J**	**0.031**	**0.032**	**0.018**	**0.0067 J**	**0.0087 J**	**0.0032 J**	**0.011 J**	**0.14**	**0.14**	**0.057**	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	**0.0045 J**	0.5 U	**0.0069 J**	**0.00062 J**	--	**0.00055 J**	0.1 U	**0.0022 J**	**0.0027 J**	**0.0014 J**	**0.0044 J**	**0.0036 J**	**0.0047 J**	**0.0043 J**	**0.0054 J**	**0.0082 J**	**0.0043 J**	**0.00041 J**	**0.00052 J**	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.022 J**	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.023 J**	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.032 J**	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.0086 J**	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.026 J**	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	**0.0045 J**	0.1 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	**0.0048 J**	0.1 U	0.05 U	**0.009 J**	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	**0.0049 J**	0.5 U	**0.011 J**	--	--	0.01 U	**0.0033 J**	**0.0023 J**	**0.0025 J**	**0.0017 J**	--	**0.0066 J**	0.05 U	**0.0055 J**	**0.0088 J**	**0.0098 J**	**0.0086 J**	**0.00078 J**	**0.00086 J**	0.01 U
Fluoranthene	1	mg/L	**0.0016 J**	0.5 U	**0.0024 J**	0.01 U	--	0.01 U	0.1 U	**0.00094 J**	**0.001 J**	**0.00076 J**	**0.0019 J**	0.1 U	**0.002 J**	**0.0019 J**	**0.0039 J**	**0.0047 J**	**0.0017 J**	0.01 U	0.01 U	0.01 U
Fluorene	1	mg/L	**0.02**	**0.029 J**	**0.048 J**	**0.0047 J**	--	**0.00052 J**	**0.013 J**	**0.011**	**0.012**	**0.0077 J**	**0.026 J**	**0.028 J**	**0.027 J**	**0.027 J**	**0.031 J**	**0.043 J**	**0.039 J**	**0.006 J**	**0.0076 J**	**0.0046 J**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.05 U	0.1 U	0.05 U	0.05 U	0.1 U	0.05 U	**0.0083 J**	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	**7.4 D**	**12**	**9.5 D**	**0.11**	--	**0.0059 J**	**1.7**	**0.66 D**	**0.72 D**	**0.19**	**4 D**	**7 D**	**4.1 D**	**7 D**	**7 D**	**6.8 D**	**3.4 D**	**0.039**	**0.11**	**0.068**
Phenanthrene	*	mg/L	**0.026**	**0.026 J**	**0.04 J**	**0.0027 J**	--	**0.00071 J**	**0.0093 J**	**0.009 J**	**0.0091 J**	**0.0044 J**	**0.026 J**	**0.026 J**	**0.024 J**	**0.027 J**	**0.032 J**	**0.033 J**	**0.027 J**	**0.0022 J**	**0.0026 J**	**0.0012 J**
Pyrene	1	mg/L	**0.0019 J**	0.5 U	0.05 U	0.01 U	--	0.01 U	0.1 U	**0.0019 J**	**0.0022 J**	**0.001 J**	**0.0028 J**	0.1 U	**0.0033 J**	**0.003 J**	**0.0055 J**	**0.0082 J**	0.05 U	0.01 U	0.01 U	0.01 U
Inorganic Compounds																						
Aluminum (fume or dust)	*	mg/L	0.2 U	**0.04 B**	**0.04 B**	--	--	--	0.2 U	0.2 U	0.2 U	**0.086 B**	--	0.2 U	**0.057 B**	0.2 U	0.2 U	**1.0**	**0.57**	0.2 U	0.2 U	**0.12 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	--	--	--	0.02 U	0.02 U	0.02 U	**0.0060 B**	--	0.02 U	0.02 U	**0.0065 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0034 B**	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.48**	**0.39**	**0.38**	--	--	--	**0.18**	**0.09**	**0.085**	**0.059**	--	**1**	**0.87**	**0.92**	**0.45**	**0.48**	**0.31**	**0.45**	**0.45**	**0.46**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	--	--	--	0.004 U	0.004 U	0.004 U	**0.0023 B**	--	0.004 U	0.004 U	**0.0023 B**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0022 B**
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	--	--	--	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	**0.00075 B**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**79**	**77**	**72**	--	--	--	**120**	**95**	**90**	**87**	--	**33**	**27**	**28**	**73**	**74**	**57**	**21**	**20**	**20**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	**0.0066 B**	**0.0053 B**	**0.0042 B**	**0.0073 B**	--	**0.018**	**0.016**	**0.015**	**0.0021 B**	**0.0017 B**	0.01 U	**0.0069 B**	**0.0084 B**	**0.0085 B**
Copper	1.3	mg/L	**0.00096 B**	0.02 U	0.02 U	--	--	--	**0.003 B**	**0.0034 B**	**0.0032 B**	**0.0051 B**	--	**0.0011 B**	0.02 U	0.02 U	0.02 U	**0.0029 B**	**0.0035 B**	**0.0014 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	**0.048**	**0.034**	**0.029**	--	**4.1**	**10**	**1.9**	**1.5**	**1.7**	**2.9**	--	**0.036**	**0.043**	**0.046**	**0.037**	**0.038**	**0.036**	**0.011**	**0.0096 B**	**0.017**
Iron	*	mg/L	**9.8**	**9.8**	**9.3**	--	--	--	**6.4**	**5.0**	**4.5**	**3.8**	--	**110**	**93**	**98**	**21**	**23**	**12**	**75**	**83**	**84**
Lead	0.015	mg/L	0.005 U	0.005 U	0.005 U	--	--	--	0.005 U	0.005 U	0.005 U	**0.0021 B**	--	0.005 U	0.005 U	**0.002 B**	0.005 U	0.005 U	**0.0019 B**	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**69**	**71**	**64**	--	--	--	**9.7**	**6.7**	**6.4**	**5.7**	--	**36**	**29**	**31**	**36**	**35**	**18**	**20**	**19**	**19**
Manganese	*	mg/L	**2.6**	**2.7**	**2.6**	--	--	--	**1.2**	**0.63**	**0.59**	**0.3**	--	**5.4**	**4.6**	**4.9**	**1.2**	**1.5**	**0.56**	**1.6**	**1.7**	**1.8**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.00020 U	--	--	--	0.0002 U	0.0002 U	0.0002 U	0.00020 U	--	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	--	--	--	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**1.8**	**1.7**	**1.7**	--	--	--	**6.8**	**5.7**	**5.4**	**4.3**	--	**3.2**	**2.7**	**3.2**	**9.1**	**8.6**	**5.1**	**2.8**	**2.6**	**3.2**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**59**	**58**	**58**	--	--	--	**14**	**7.9**	**7.5**	**6.2**	--	**30**	**32**	**31**	**19**	**20**	**10**	**59**	**57**	**51**
Thallium	0.002	mg/L	0.002 U	0.002 U	0.002 U	--	--	--	0.002 U	0.002 U	0.002 U	0.002 U	--	0.002 U	0.002 U	0.002 UW	0.002 U	0.002 U	0.002 UW	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0034 B**	0.01 U	**0.0025 B**	0.01 U	0.01 U	0.01 U	**0.0027 B**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	--	--	--	**0.0066 B**	0.02 U	0.02 U	0.02 U	--	**0.012 B**	0.02 U	0.02 U	**0.0064 B**	**0.073**	**0.039**	**0.008 B**	0.02 U	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
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JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-11																									
		Sample Date	1/16/2012	7/5/2011	1/17/2011	7/13/2010	1/5/2010	7/21/2009	1/13/2009	7/15/2008	1/10/2008	8/21/2007**	7/11/2007	2/14/2007	7/11/2006	1/10/2006	7/21/2005	1/18/2005	7/16/2004	1/22/2004	7/18/2003	1/20/2003	7/9/2002	7/9/2002	4/3/2002	1/17/2002	7/11/2001	1/24/2001
		Unit	Post ISCO														Pre-ISCO											
Volatile Organic Compounds																												
Acetone	4	µg/L	< 5.0	< 5.0	< 5.0	< 100	< 100	< 100	< 100	< 100	< 50	< 50	--	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	**140**	25 U	25 U	--	25 U	**20 J**	25 U
Benzene	0.005	µg/L	< 0.25	< 0.25	**0.29 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.39 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**	1.0 U
Carbon Disulfide	4	µg/L	< 0.60	< 0.60	< 0.60	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**10**	1.0 U	1.0 U	--	1.0 U	**0.79 J**	1.0 U
Ethylbenzene	0.7	µg/L	< 0.11	< 0.11	**0.12 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.13 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	0.005	µg/L	< 1.0	**3.5 J B**	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.38 J**	5.0 U	5.0 U	5.0 U	5.0 U	**1.1 JB**
Toluene	1	µg/L	< 0.33	< 0.33	< 0.33	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.32 J**	**0.47 J**	**0.36 J**	1.0 U	**0.39 J**	**0.44 J**	1.0 U
Trichloroethylene	0.005	µg/L	< 0.13	< 0.13	< 0.13	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.83 J**	1.0 U
Xylenes, total	2	µg/L	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.14 JB**	2.0 U	2.0 U	--	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds																												
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	**0.23**	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	**0.06**	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.045	< 0.056	< 0.044	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	**0.18**	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	--	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.099	< 0.12	**0.41**	< 0.19	0.21	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	10	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	**0.018 J**	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.099	< 0.12	< 0.099	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																												
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.16 J**	**0.079 B**	--	0.2 U	0.2 U	**0.49**
Antimony	0.01	mg/L	< 0.0053	< 0.0053	< 0.0053	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.0046	< 0.0046	**0.0090 J**	< 0.020	< 0.020	< 0.020	< 0.010	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0053 B**	--	**0.0086 B**	0.01 U	**0.0067 B**
Barium	2	mg/L	**0.83**	**0.81**	**1.5**	0.82	1	1	**0.68**	**0.81**	**0.648**	--	**0.779**	**0.754**	**0.933**	**0.779**	**1.05**	**0.92**	**1.1**	**0.62**	**0.73**	**0.47**	**0.68**	**0.65**	--	**0.58**	**0.64**	**1.7**
Beryllium	0.004	mg/L	< 0.00020	**0.00020 J**	**0.00027 J**	**0.00020 J**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	**0.00085 B**	**0.00057 B**	0.004 U
Cadmium	0.005	mg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.02**	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**24.1**	**26.5**	**26**	**30**	**20**	**21**	**15**	**20**	**20**	--	**19**	**18**	**42**
Chromium	0.1	mg/L	**0.0015 J**	**0.0016 J**	**0.0072 J**	< 0.010	< 0.010	< 0.010	**0.0013 J**	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0261**	**0.0271**	**0.032**	**0.036**	**0.019**	**0.02**	**0.016**	**0.025**	**0.024**	--	**0.023**	**0.02**	**0.053**
Copper	1.3	mg/L	< 0.0019	< 0.0019	**0.0058 J**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0011 B**	0.02 U	0.02 U	--	0.02 U	**0.0011 BN**	0.02 U
Cyanide	0.2	mg/L	< 0.0050	**0.021**	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.010	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.01**	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**17.6**	**17.2**	**18**	**20**	**17**	**18**	**15**	**17**	**17**	--	**17**	**16**	**25**
Mercury	0.002	mg/L	< 0.000091	< 0.000091	< 0.000091	<0.00020	<0.00020	0.00022	**0.000081 J**	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.00012 B**	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	**0.013 J**	**0.011 J**	**0.014 J**	**0.013 J**	< 0.040	< 0.040	**0.0087 J**	**0.011 J**	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0048 B**	**0.0097 J**	**0.0095 B**	--	**0.012 B**	**0.019 B**	**0.0095 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	5 U	**2.45**	**2.8**	**3.1**	**2.1**	**2.1**	**1.6**	**2.1**	**2**	--	**2 N**	**2.0**	**3.6**
Selenium	0.05	mg/L	< 0.0064	< 0.0064	< 0.0064	< 0.020	< 0.020	< 0.020	**0.0045 J**	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	**36.4**	**37.2**	**37**	**41**	**22**	**38**	**42**	**41**	**41**	--	**37**	**43**	**44**
Thallium	0.002	mg/L	< 0.00025	< 0.00025	< 0.00025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 1.00	--	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 UWN	0.002 UJ	0.002 UWN	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.0024	< 0.0024	**0.0063 J**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.0031 U	**0.0023 B**	--	**0.0039 B**	**0.0025 B**	0.01 U
Zinc	2	mg/L	< 0.0087	< 0.0087	**0.013 J**	< 0.020	< 0.020	< 0.020	**0.0098 J**	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.04**	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-13						MW-14		MW-15		MW-18																				
		Sample Date	3/8/2002	3/8/2002	1/22/2002	7/17/2001	1/23/2001	1/23/2001	3/8/2002	3/8/2002	7/18/2001	1/24/2001	7/22/2009	01/13/2009	07/17/2008	1/9/2008	8/21/07***	7/12/2007	2/13/2007	7/12/2006	1/10/2006	7/20/2005	7/12/2004	2/10/2004	7/15/2003	1/17/2003	7/11/2002	1/18/2002	7/12/2001	1/17/2001
		Unit	Pre-ISCO						Pre-ISCO		Pre-ISCO		Post-ISCO									Pre-ISCO								
Volatile Organic Compounds																																	
Acetone	4	mg/L	--	0.5 U	5 U	0.62 U	0.25 U	2.5 U	10 U	--	**0.025 R**	**0.013 J**	< 100 U	< 100 U	< 100	< 50	--	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	0.005	mg/L	--	**1.9**	**30**	**19 D**	**9.3 D**	**9.6**	**34**	--	**0.00048 J**	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.22 J**	**0.33 J**
Carbon Disulfide	4	mg/L	--	0.02 U	0.2 U	0.025 U	0.01 U	0.1 U	0.4 U	--	0.00039 U	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	0.005	mg/L	--	0.1 U	1 U	0.12 U	0.05 U	0.5 U	2 U	--	0.005 U	**0.00045 J**	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.55 JB**
Ethylbenzene	0.7	mg/L	--	**0.65**	**4.9**	**4.4**	**2.8 D**	**2.4**	**19**	--	0.001 U	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.24 J**	1.0 U
Toluene	1	mg/L	--	**0.64**	**11**	**2.2**	**2.5 D**	**2.1**	**0.31 J**	--	**0.00037 J**	0.001 U	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	0.005	mg/L	--	0.02 U	0.2 U	0.025 U	0.01 U	0.1 U	0.4 U	--	**0.00031 J**	0.001 U	**6.7**	**5.3**	5.0 J	**11**	--	**11**	**6.9**	5 U	**1.6**	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	**0.67 J**	1.0 U	1.0 U	1.0 U
Xylenes, total	2	mg/L	--	**0.83**	**3.7**	**2.8**	**2.6**	**2.1**	**49**	--	**0.0014 J**	**0.00023 J**	< 5.0 U	< 5.0 U	< 5.0	< 5.0	--	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.6 J**	2.0 U
Semivolatile Organic Compounds																																	
2-Methylnaphthalene	*	mg/L	--	**0.24 D**	**0.58**	**0.57**	**0.7**	**0.75**	**36 D**	--	**0.00054 J**	**0.003 J**	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	2	mg/L	--	**0.038**	**0.11**	**0.12**	**0.097**	**0.1**	**4.6**	--	**0.015**	**0.018**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	0.0002	mg/L	--	**0.026**	**0.023 J**	**0.015 J**	**0.073**	**0.08**	**1.2**	--	0.01 U	0.01 U	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	0.0002	mg/L	--	**0.0042 J**	0.1 U	**0.002 J**	0.05 U	0.05 U	**2.6**	--	**0.0046 J**	**0.013**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.0001	mg/L	--	**0.00093 J**	0.1 U	0.05 U	0.05 U	0.05 U	**1.3**	--	**0.0017 J**	**0.01**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.0002	mg/L	--	**0.00049 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.43 J**	--	**0.00092 J**	**0.0066 J**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.0002	mg/L	--	**0.0005 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.49 J**	--	**0.00066 J**	**0.0035 J**	< 0.19 U	< 0.19 U	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	0.0002	mg/L	--	**0.001 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.57**	--	0.01 UJ	**0.003 J**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0002	mg/L	--	0.01 U	0.1 U	0.05 U	0.05 U	0.05 U	**0.57**	--	**0.00092 J**	**0.0054 J**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.0002	mg/L	--	**0.00095 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.97**	--	**0.0018 J**	**0.014**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.003	mg/L	--	0.01 U	0.1 U	0.05 U	0.05 U	0.05 U	**0.13 J**	--	0.01 UJ	0.01 U	< 0.19 U	< 0.19 U	< 0.19	< 0.10	--	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	0.001	mg/L	--	**0.0025 J**	**0.0048 J**	**0.0046 J**	**0.0057 J**	**0.0059 J**	**2**	--	**0.00078 J**	**0.0011 J**	--	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1	mg/L	--	**0.0013 J**	0.1 U	0.05 U	0.05 U	0.05 U	**3**	--	**0.0026 J**	**0.017**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1	mg/L	--	**0.016**	**0.013 J**	**0.014 J**	**0.02 J**	**0.019 J**	**3.9**	--	**0.0058 J**	**0.01**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	--	**0.0012 J**	0.1 U	0.05 U	0.05 U	0.05 U	**0.74**	--	0.01 UJ	**0.0034 J**	< 0.19 U	< 0.19 U	< 0.19	< 0.050	--	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	0.02	mg/L	--	**3.1 D**	**12 D**	**9 D**	**7.4 D**	**9.3 D**	**100 D**	--	0.01 U	**0.0042 J**	< 0.19 U	0.026 J	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	**0.56 J**	10 U
Phenanthrene	*	mg/L	--	**0.007 J**	**0.0099 J**	**0.013 J**	**0.014 J**	**0.015 J**	**10 D**	--	**0.016**	**0.064**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1	mg/L	--	**0.0012 J**	0.1 U	0.05 U	0.05 U	0.05 U	**2.7**	--	**0.0062 J**	**0.027**	< 0.19 U	< 0.19 U	< 0.19	< 10	--	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																																	
Aluminum (fume or dust)	*	mg/L	--	--	**0.041 B**	**0.12 BN**	**2.1**	**0.48**	--	--	**24**	**65**	--	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Antimony	0.01	mg/L	--	--	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	< 0.020 U	< 0.020 U	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0088 B**
Arsenic	0.05	mg/L	--	--	**0.0052 B**	0.01 U	**0.0077 B**	**0.0048 B**	--	--	0.01 U	**0.014**	< 0.020 U	< 0.010 U	< 0.010	<0.0500	--	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	--	--	**0.15**	**0.16**	**0.17**	**0.16**	--	--	**0.35**	**0.5**	**0.048**	**0.048**	**0.048**	**0.044**	**0.0461**	--	**0.0327**	**0.0451**	**0.0523**	0.2 U	**0.049**	**0.058**	**0.065**	**0.07**	**0.06**	**0.064**	**0.072**	**0.067**	**0.097**
Beryllium	0.004	mg/L	--	--	0.004 U	0.004 U	0.004 U	0.004 U	--	--	**0.00056 J**	**0.0021 B**	< 0.0040 U	< 0.0040 U	< 0.0040	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0019 B**
Cadmium	0.005	mg/L	--	--	0.005 U	0.005 U	0.005 U	0.005 U	--	--	**0.001 J**	**0.0034 B**	< 0.0050 U	< 0.0050 U	< 0.0050	< 0.0050	--	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	**32**	**54**	**61**	**63**	--	--	**140**	**130**	--	--	--	--	--	--	--	--	**21**	**24.4**	**29**	**29**	**36**	**30**	**29**	**33**	**33**	**29**
Chromium	0.1	mg/L	--	--	0.01 U	0.01 U	**0.0025 B**	0.01 U	--	--	**0.038**	**0.1**	**0.017**	0.0087 J	0.0066 J	< 0.0100	--	< 0.010	< 0.01	0.01 U	**0.0064**	0.01 U	**0.036**	**0.032**	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	0.01 U	0.01 U	**0.002 B**	**0.0023 B**	--	--	**0.006 J**	**0.017**	--	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.0035 B**	**0.0033 B**	**0.0036 B**	**0.0033 B**	**0.0029 B**
Copper	1.3	mg/L	--	--	**0.0013 B**	**0.0017 B**	**0.0052 B**	**0.008 B**	--	--	**0.017 J**	**0.05**	< 0.020 U	< 0.020 U	< 0.020	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0027 B**	**0.0012 B**	**0.0018 B**	0.02 U	0.02 U
Cyanide	0.2	mg/L	**0.2**	**0.26**	**0.04**	**0.14**	**0.14**	**0.12**	**1.8**	**1.7**	**0.027**	--	< 0.010 U	< 0.010 U	0.0051 J	< 0.010	--	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	--	--	**11**	**9.6**	**15**	**15**	--	--	**39**	**66**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	--	--	0.005 U	0.005 U	**0.004 B**	**0.0028 B**	--	--	0.027 U	**0.061**	< 0.010 U	< 0.0050 U	< 0.0050	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	**0.0051**
Magnesium	*	mg/L	--	--	**28**	**19**	**24**	**22**	--	--	**31**	**34**	--	--	--	--	--	--	--	--	**14.1**	**15.9**	**18**	**18**	**17**	**17**	**17**	**20**	**20**	**19**
Manganese	*	mg/L	--	--	**1**	**3.1**	**3.6**	**4.1**	--	--	**0.88**	**1.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	--	--	0.0002 U	0.0002 U	0.00020 U	0.00020 U	--	--	0.0002 U	**0.00014 B**	< 0.00020 U	0.000083 J	< 0.00020	< 0.00020	--	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	**0.00022**	**0.0011**	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	--	--	0.04 U	0.04 U	0.04 U	0.04 U	--	--	**0.02 J**	**0.053**	< 0.040 U	0.021 J	0.0043 J	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 UJ	0.04 U	0.04 U	0.04 U	0.04 U	**0.0093 B**
Potassium	*	mg/L	--	--	**7.2**	**9.3**	**8.7**	**7.9**	--	--	**18**	**20**	--	--	--	--	--	--	--	--	5 U	**4.85**	**7.4**	**9.7**	**8.8**	**10**	**10**	**11**	**10**	**9.9**
Selenium	0.05	mg/L	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	**0.0051 B**	< 0.020 U	< 0.010 U	< 0.010	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	**11**	**10**	**12**	**11**	--	--	**31**	**26**	--	--	--	--	--	--	--	--	**57.8**	**63.1**	**68**	**64**	**59**	**56**	**57**	**62**	**60**	**55**
Thallium	0.002	mg/L	--	--	0.002 U	0.002 UN	0.002 U	0.002 UW	--	--	0.002 U	0.002 UW	< 0.0010 U	< 0.0010 U	< 0.0010	< 1.00	--	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UWN	0.002 UW	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	--	--	0.01 U	0.01 U	0.01 U	0.01 U	--	--	**0.047**	**0.12**	< 0.010 U	< 0.010 U	< 0.010	< 0.0100	--	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	--	--	0.02 U	0.02 U	**0.0076 B**	0.02 U	--	--	**0.046**	**0.12**	< 0.020 U	< 0.020 U	< 0.020	< 0.0200	--	< 0.02	< 0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.014 B**	**0.0064 B**	**0.0066 B**	**0.0064 B**	**0.0086 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-23																
		Sample Date	7/22/2009	01/13/2009	07/15/2008	1/9/2008	7/11/2007	2/13/2007	7/12/2006	1/10/2006	7/21/2005	1/19/2005	7/14/2004	1/24/2004	7/20/2003	1/16/2003	7/17/2002	1/18/2002	7/10/2001
		Unit	Post-ISCO								Pre-ISCO								
Volatile Organic Compounds																			
Acetone	4,000	µg/L	< 100	< 100	< 100	< 50	< 50	< 50	50 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**21 J**	25 U
Benzene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**27**	1.0 U	1.0 U
Carbon Disulfide	4,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**130**	1.0 U	1.0 U
Methylene Chloride	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.8**	1.0 U	1.0 U
Trichloroethylene	5	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2,000	µg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5	< 5	5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**66**	2.0 U	2.0 U
Semivolatile Organic Compounds																			
2-Methylnaphthalene	*	µg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.78 J**	10 U	10 U
Acenaphthene	2,000	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**0.63 J**	10 U	10 U
Acenaphthylene	10	µg/L	< 0.19	**0.021 J**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	µg/L	< 0.19	**0.056 J**	**0.093 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.1	µg/L	< 0.19	< 0.20	**0.026 J**	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	µg/L	< 0.19	< 0.20	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.2	µg/L	< 0.19	< 0.20	< 0.19	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	µg/L	< 0.19	< 0.20	**0.037 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.2	µg/L	< 0.19	< 0.20	< 0.19	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.3	µg/L	< 0.19	< 0.20	**0.028 J**	<0.10	< 0.1	< 0.1	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	1	µg/L	--	--	--	--	--	--	--	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1,000	µg/L	< 0.19	**0.027 J**	**0.053 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1,000	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.4	µg/L	< 0.19	< 0.20	**0.024 J**	<0.050	< 0.05	< 0.05	0.05 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	20	µg/L	< 0.19	**16**	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	**5.9 J**	10 U	10 U
Phenanthrene	10	µg/L	< 0.19	< 0.20	< 0.19	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Pyrene	1,000	µg/L	< 0.19	< 0.20	**0.032 J**	< 10	< 10	< 10	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																			
Aluminum (fume or dust)	*	mg/L	--	--	--	--	--	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.060 B**	**0.038 B**	0.2 U	0.2 U
Antimony	0.01	mg/L	< 0.020	< 0.020	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	< 0.020	< 0.010	< 0.010	<0.0500	< 0.05	< 0.05	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	0.052	0.075	**0.044**	**0.0515**	**0.0280**	**0.0307**	**0.0312**	0.2 U	**0.0332**	**0.036**	**0.034**	**0.043**	0.01 U	**0.049**	**0.092**	**0.19**	**0.14**
Beryllium	0.004	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	**0.00066 B**	0.004 U
Cadmium	0.005	mg/L	< 0.0050	**0.0038 J**	< 0.0050	< 0.0050	< 0.005	< 0.005	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	--	--	--	--	--	--	--	**10.1**	**10.1**	**13**	**13**	**16**	**14**	**21**	**32**	**50**	**44**
Chromium	0.1	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	--	--	--	--	--	--	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0016 B**	0.01 U
Copper	1.3	mg/L	< 0.020	**0.0033 J**	< 0.020	< 0.0100	< 0.010	< 0.01	0.01 U	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0010 B**	**0.0022 B**	**0.0011 B**	**0.00094 B**
Cyanide	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 U	0.01 U	0.01 U	0.01 U
Lead	0.015	mg/L	< 0.010	**0.0033 J**	< 0.0050	< 0.0100	< 0.010	< 0.01	0.01 U	0.003 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	--	--	--	--	--	--	--	**9.43**	**9.04**	**12**	**12**	**14**	**12**	**20**	**29**	**47**	**42**
Mercury	0.002	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	< 0.040	< 0.040	< 0.040	< 0.0200	< 0.02	< 0.02	0.02 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	**0.0083 B**
Potassium	*	mg/L	--	--	--	--	--	--	--	5 U	1 U	1 U	1 U	1 U	**0.7**	**0.71 B**	**0.87 B**	**1.3 N**	**0.93 B**
Selenium	0.05	mg/L	< 0.020	< 0.010	< 0.010	< 0.0200	< 0.02	< 0.02	0.02 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	--	--	--	--	--	--	--	**72.4**	**73.7**	**95**	**95**	**110**	**110**	**160**	**270**	**380**	**330**
Thallium	0.002	mg/L	< 0.0010	< 0.0010	< 0.0010	< 1.00	< 1.00	< 0.001	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.010	< 0.01	0.01 U	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.022	0.049	< 0.020	< 0.0200	< 0.02	< 0.02	0.02 U	0.02 U	**0.0314**	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	**0.0087 B**	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compound
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
H - Holding time exceeded
ISCO - *in-situ* chemical oxidation
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
R - Sample data results rejected due to deficiencies in the ability to meet quality control standards
RRS - Risk Reduction Standard
<, U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID	MW-201	MW-202					MW-208		MW-209	MW-210
		Sample Date	7/9/2002	1/16/2003	7/12/2002	1/17/2002	7/11/2001	1/17/2001	7/11/2001	1/16/2001	4/3/2002	10/5/2006
		Unit	Pre-ISCO	Pre-ISCO					Pre-ISCO		Pre-ISCO	Post-ISCO
Volatile Organic Compounds												
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	**0.023 J**	0.025 U	0.025 U	0.025 UJ	--	50 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	**0.00025 J**	0.001 U	**0.0017**	**0.0012**	0.001 U	5 U
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	**0.00094 J**	0.001 U	**0.00046 J**	**0.00045 J**	--	5 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00035 J**	0.005 U	0.005 U	5 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00011 J**	0.001 U	0.001 U	5 U
Toluene	1	mg/L	0.001 U	0.001 U	**0.00051 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	5 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00032 J**	0.001 U	0.001 U	5 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	5 U
Semivolatile Organic Compounds												
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Acenaphthene	2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U
Dibenzofuran	0.001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
Fluoranthene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Fluorene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Pyrene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10 U
Inorganic Compounds												
Aluminum (fume or dust)	*	mg/L	**0.042 J**	**0.050 B**	**0.037 B**	**0.12 B**	0.2 U	0.2 U	**0.17 B**	**19**	--	--
Antimony	0.01	mg/L	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	**0.005 B**	0.02 U	**0.013 J**	--	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.024**	**0.033**	--	0.05 U
Barium	2	mg/L	**0.084**	**0.064**	**0.11**	**0.13**	**0.13**	**0.12**	**0.21**	**0.3**	--	**0.0474**
Beryllium	0.004	mg/L	0.004 U	0.0040 U	0.004 U	**0.00077 B**	**0.00058 B**	**0.002 B**	0.004 U	0.0018 U	--	0.01 U
Cadmium	0.005	mg/L	0.0011 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0011 B**	0.005 U	--	0.005 U
Calcium metal	*	mg/L	**49**	**38**	**52**	**64**	**59**	**60**	**11**	**10**	--	--
Chromium	0.1	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 UN	0.01 U	0.01 UN	**0.025**	--	0.01 U
Cobalt	*	mg/L	**0.0099 J**	**0.0069 B**	**0.01**	**0.015**	**0.012**	**0.014**	**0.0014 B**	**0.0038 J**	--	--
Copper	1.3	mg/L	0.0016 U	0.020 U	**0.0012 B**	0.02 U	0.02 UN	0.02 U	**0.0021 BN**	**0.064**	--	0.01 U
Cyanide	0.2	mg/L	**0.12**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U
Iron	*	mg/L	**0.28**	**0.019 B**	**0.076**	**0.13**	0.05 U	**0.043 B**	**85**	**100**	--	--
Lead	0.015	mg/L	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	**0.0035 B**	**0.0041 B**	**0.099**	--	0.01 U
Magnesium	*	mg/L	**39**	**32**	**44**	**56**	**52**	**53**	**17**	**17**	--	--
Manganese	*	mg/L	**1.5**	**0.45**	**1.2**	**1.9 N**	**1.6 N**	**1.7**	**0.9 N**	**0.98**	--	--
Mercury	0.002	mg/L	0.0002 U	**0.000078 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	--	0.0002 U
Nickel	0.1	mg/L	**0.0049 J**	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0097 J**	--	0.02 U
Potassium	*	mg/L	**1.1**	**1.0**	**1.4**	**1.7 N**	**1.6**	**1.6**	**2.0**	**2.6**	--	--
Selenium	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.02 U
Sodium	*	mg/L	**100**	**100**	**18**	**150**	**170**	**120**	**44**	**44**	--	--
Thallium	0.002	mg/L	0.002 UJ	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U	0.002 U	0.002 U	--	0.001 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.0028 B**	**0.0033 B**	**0.003 B**	**0.0026 B**	0.01 U	0.01 U	**0.041**	--	0.01 U
Zinc	2	mg/L	**0.018 J**	0.020 U	**0.0086 B**	**0.017 B**	**0.017 B**	**0.0095 B**	**0.023**	**0.069**	--	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	MW-212						MW-213	MW-301D	MW-301S									MW-308SAP
		Sample Date	7/22/2005	1/16/2003	7/12/2002	1/16/2002	7/13/2001	1/18/2001	4/4/2002	7/19/2003	1/20/2003	1/20/2003	7/17/2002	7/17/2002	4/4/2002	1/17/2002	1/17/2002	7/17/2001	1/17/2001	1/19/2001
		Unit	Pre-ISCO						Pre-ISCO	Pre-ISCO	Pre-ISCO									Pre-ISCO
Volatile Organic Compounds																				
Acetone	4	mg/L	0.025 U	**0.016 J**	0.025 U	0.025 U	0.025 U	0.025 U	--	0.63 U	**0.074 J**	**0.11 J**	0.12 U	0.12 U	--	**0.12 R**	**0.12 R**	0.12 U	0.12 U	5 U
Benzene	0.005	mg/L	0.001 U	**0.00014 J**	0.001 U	0.001 U	0.001 U	**0.00012 J**	0.001 U	--	**0.071**	**0.076**	**0.074**	**0.099**	**0.05**	**0.051**	**0.056**	**0.075**	**0.057**	**33**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.2 U
Dichloromethane	0.005	mg/L	0.005 U	**0.00033 J**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.13 U	**0.0021 J**	**0.0026 J**	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	1 U
Ethylbenzene	0.7	mg/L	0.001 U	**0.00011 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	**0.54**	**0.65**	**0.88**	**0.71 D**	**0.48**	**0.41**	**0.42**	**0.53**	**0.54**	**0.68**
Toluene	1	mg/L	0.001 U	**0.00041 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	**0.0049 J**	**0.0064**	**0.0068**	**0.0069**	**0.011**	**0.0041 J**	0.005 U	**0.014**	**0.015**	**14**
Trichloroethylene	0.005	mg/L	0.001 U	**0.00017 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0046 J**	0.005 U	0.005 U	0.2 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--	**0.15 B**	**0.2 B**	**0.27**	**0.31**	--	**0.14**	**0.15**	**0.28**	**0.3**	**4.6**
Semivolatile Organic Compounds																				
2-Methylnaphthalene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.46 J M**	**0.32 D**	**0.32 D**	**0.47 D**	**0.49 D**	--	**0.44**	**0.5**	**0.38**	**0.81 D**	**0.69 D**
Acenaphthene	2	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.014**	**0.079**	**0.086**	**0.093**	**0.1**	**0.077**	**0.083 J**	**0.1**	**0.085**	**0.14**	**0.012**
Acenaphthylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00081 J**	**0.13**	**0.0035 J**	**0.0031 J**	**0.0047 J**	**0.0048 J**	0.01 U	**0.012 J**	**0.0097 J**	**0.0073 J**	**0.036**	**0.18**
Anthracene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0046 J**	**0.0055 J**	**0.0071 J**	**0.0074 J**	**0.0049 J**	**0.0064 J**	**0.0061 J**	**0.0036 J**	**0.0081 J**	**0.0038 J**
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	**0.0043 J**	**0.0048 J**	**0.0054 J**	**0.006 J**	--	**0.0054 J**	**0.0064 J**	**0.0045 J**	**0.0092 J**	**0.0072 J**
Fluoranthene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.002 J**	**0.0024 J**	**0.0026 J**	**0.0028 J**	**0.0014 J**	**0.004 J**	0.1 U	0.05 U	**0.0033 J**	**0.0017 J**
Fluorene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.024**	**0.025**	**0.028**	**0.033**	**0.036**	**0.02**	**0.028 J**	**0.028 J**	**0.025 J**	**0.041**	**0.031**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.05 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0059 J**	**7.3 J M**	**1.3 D**	**1.3 D**	**2 D**	**1.9 D**	**1.4 D**	**1.6**	**1.6 D**	**1.6 D**	**3.3 D**	**6.4 D**
Phenanthrene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0012 J**	**0.021**	**0.029**	**0.032**	**0.035**	**0.038**	**0.023**	**0.039 J**	**0.04 J**	**0.028 J**	**0.05**	**0.026**
Pyrene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0025 J**	**0.003 J**	**0.0027 J**	**0.0032 J**	**0.0022 J**	**0.007 J**	0.1 U	0.05 U	**0.0043 J**	**0.0018 J**
Inorganic Compounds																				
Aluminum (fume or dust)	*	mg/L	**1.99**	**0.046 B**	**0.031 B**	**0.096 B**	**0.063 B**	**0.046 B**	--	**0.5**	0.2 U	0.2 U	**0.045 B**	**0.043 B**	--	0.2 U	0.2 U	**0.047 BN**	**0.48**	**0.1 B**
Antimony	0.01	mg/L	0.006 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	**0.011 B**	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	**0.0079 B**	**0.0062 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.0685**	**0.25**	**0.26**	**0.32**	**0.3**	**0.29**	--	**0.39**	**0.32**	**0.29**	**0.36**	**0.35**	--	**0.31**	**0.32**	**0.35**	**0.38**	**0.37**
Beryllium	0.004	mg/L	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.00077 U	0.00073 U	0.004 U	**0.0015 B**	0.004 U
Cadmium	0.005	mg/L	0.005 U	**0.0010 B**	**0.0012 B**	**0.00074 B**	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**40.2**	**12**	**12**	**16**	**14**	**14**	--	**37**	**78**	**75**	**74**	**73**	--	**87**	**85**	**84**	**95**	**22**
Chromium	0.1	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	**0.0046 B**	**0.0054 B**	**0.0072 B**	**0.0067 B**	**0.0064 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	**0.0028 B**
Copper	1.3	mg/L	0.02 U	**0.0018 B**	**0.0011 B**	**0.0041 B**	0.02 U	**0.002 B**	--	0.02 U	**0.0014 B**	**0.0013 B**	**0.0014 B**	**0.0014 B**	--	0.02 U	0.02 U	0.02 U	**0.0025 B**	**0.0016 B**
Cyanide	0.2	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.015 U	0.01 U	**0.0052 B**	0.01 U	0.01 U	--	**0.0062 B**	**0.0051 B**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**1.89**	**0.91**	**0.76**	**1.3**	**0.91**	**1.1**	--	**31**	**41**	**38**	**46**	**46**	--	**37**	**38**	**36**	**34**	**10 N**
Lead	0.015	mg/L	**0.0389**	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	--	**0.007**	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	**0.0027 B**	0.005 U
Magnesium	*	mg/L	**4.18**	**7.1**	**6.9**	**9**	**8.5**	**8.2**	--	**27**	**40**	**37**	**45**	**45**	--	**37**	**38 J**	**33**	**34**	**11**
Manganese	*	mg/L	**0.274**	**0.86**	**0.89**	**1.3**	**1.1**	**1.1**	--	**2.8**	**5**	**4.7**	**5.9**	**5.9**	--	4.4 U	**4.6 N**	**4.8**	**5.0**	**1.1**
Mercury	0.002	mg/L	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	--	0.0002 U	**0.00013 B**	**0.00012 B**	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**23.4**	**2.4**	**2.4**	**2.5**	**2.4**	**2.4**	--	**3.6**	**13**	**12**	**13**	**13**	--	14 U	**14 J**	**14**	**15**	**2.3**
Selenium	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**16.4**	**15**	**14**	**16**	**16**	**15**	--	**46**	**13**	**12**	**13**	**13**	--	**12**	**12**	**12**	**10**	**23**
Thallium	0.002	mg/L	0.001 U	0.0020 UWN	0.002 UWN	0.002 U	0.002 UW	0.002 U	--	0.002 U	0.002 UWN	0.002 UWN	0.002 UWN	0.002 UWN	--	0.002 U	0.002 U	0.002 UN	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0028 U	0.0032 U	0.01 U	**0.0027 B**	0.01 U
Zinc	2	mg/L	**0.0564**	**0.084**	**0.093**	**0.057**	0.02 U	**0.019 B**	--	**0.04**	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	**0.011 B**	0.02 U

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction	Location ID / Sample Date / Unit	MW-405D								MW-407D											
			7/16/2004	1/24/2004	7/19/2003	1/17/2003	7/16/2002	1/16/2002	7/16/2001	1/23/2001	1/15/2006	7/20/2005	2/7/2005	7/13/2004	1/22/2004	7/20/2003	1/17/2003	7/16/2002	7/02 DUP	1/15/2002	7/17/2001	1/19/2001
			Pre-ISCO								Post-ISCO	Pre-ISCO										
Volatile Organic Compounds																						
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	10 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	**1.6**	**1.7**	1.0 U	**1.9**	**3.3**	1.0 U	**2.7**	**1.8**	**0.38 J**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.12 J**	**0.25 J**	1.0 U	**0.2 J**	1.0 U	1.0 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.41 J**	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**1.6 J**	**2.2**	2.0 U	**2.4**	**1.6 J**	**0.65 J**
Semivolatile Organic Compounds																						
2-Methylnaphthalene	*	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.44**	**0.51**	**0.92**	**5.4**	**4.4**	**11**	**0.39 J**	**1.8 J**	10 U	**4.2 J**	**1.1 J**	10 U
Acenaphthene	2	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	**2.2**	**3.5**	**12**	**15**	**18**	**8.9 J**	**13**	10 U	**8.5 J**	**2.7 J**	10 U
Acenaphthylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	1	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	1	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	**0.28**	**0.83**	**1.2**	10 U	**0.82 J**	**1.2 J**	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	0.02	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.21**	**0.66**	**0.23**	**17**	**16**	**47**	10 U	**0.95 J**	10 U	**11**	**4.8 J**	**1.2 J**
Phenanthrene	*	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	**0.8**	**0.73**	10 U	**0.5 J**	**0.65 J**	10 U	10 U	10 U	10 U
Pyrene	1	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Inorganic Compounds																						
Aluminum (fume or dust)	*	mg/L	**11**	**0.33**	**7.6**	**4.5**	**1.9**	**2.1 N**	**1.2**	**1.1**	**3.46**	**1.25**	**3.9**	**1.5**	**0.32**	**0.7**	**0.21**	**0.51**	**1.3**	**0.63 N**	**0.37 N**	**0.29**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.01 U	0.006 U	0.02 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0034 B**	0.01 U	0.010 U	**0.0052 B**	**0.0053 B**
Barium	2	mg/L	**0.21**	**0.22**	**0.25**	**0.29**	**0.27**	**0.25**	**0.23**	**0.25**	**0.544**	**0.45**	**0.76**	**0.56**	**0.36**	**0.38**	**0.54**	**0.42**	**0.27**	**0.45**	**0.5**	**0.82**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.005 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	**0.0031 B**	0.005 U	0.0050 U	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0009 B**	0.005 U	0.005 U	0.0050 U	**0.00088 B**	**0.0032 B**
Calcium metal	*	mg/L	**16**	**21**	**21**	**22**	**20**	**21**	**19**	**16**	**48.6**	**45.1**	**58**	**45**	**35**	**36**	**51**	**38**	**20**	**42**	**53**	**82**
Chromium	0.1	mg/L	**0.011**	0.01 U	**0.01**	**0.0058 B**	**0.0021 B**	**0.0030 B**	0.01 U	0.01 U	**0.0053**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	**0.0017 B**
Cobalt	*	mg/L	**0.011**	**0.011**	**0.02**	**0.017**	**0.015**	**0.015**	**0.014**	**0.014**	0.007 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0047 B**	**0.0036 B**	**0.014**	**0.0030 B**	**0.0027 B**	**0.0047 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	**0.0074 B**	**0.0047 B**	**0.0010 B**	**0.0026 B**	**0.0023 B**	0.025 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0037 B**	**0.0022 B**	**0.0027 B**	**0.0018 B**	0.02 U	**0.0018 B**
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	**11**	**0.38**	**16**	**5.6**	**2.5**	**3.1 N**	**1.8**	**2.4**	--	--	--	--	--	--	--	--	--	--	--	--
Lead	0.015	mg/L	0.005 U	0.005 U	**0.02**	**0.0031 B**	**0.0018 B**	**0.0017 B**	0.005 U	0.005 U	**0.0073**	0.005 U	**0.013**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U
Magnesium	*	mg/L	**15**	**19**	**19**	**20**	**17**	**18**	**16**	**13**	**43.3**	**35.8**	**37**	**23**	**17**	**18**	**25**	**19**	**17**	**21**	**28**	**43**
Manganese	*	mg/L	**0.53**	**0.77**	**0.79**	**0.95**	**0.9**	**1.1**	**1.0**	**1.0**	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	**0.01 B**	**0.008 B**	**0.0080 B**	**0.0065 B**	**0.0051 B**	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	**0.0078 B**	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.3**	**2.7**	**3.4**	**3**	**3.2**	**3.4**	**3.6**	**5.3**	**21.7**	**17.7**	**20**	**6.8**	**5.1**	**7**	**8.1**	**6.8**	**3**	**7.0**	**13**	**17**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	**56**	**35**	**37**	**38**	**35**	**37**	**36**	**38**	**323**	**286**	**54**	**79**	**55**	**70**	**97**	**73**	**35**	**81**	**150**	**180**
Thallium	0.002	mg/L	0.002 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.0020 U	0.002 U	0.002 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UW	0.0020 U	0.002 UN	0.002 U
Vanadium (fume or dust)	0.2	mg/L	**0.028**	0.01 U	**0.03**	**0.013**	**0.0057 B**	**0.0067 B**	**0.0038 B**	**0.0035 B**	**0.0082**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0037 B**	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.027**	**0.03**	**0.07**	**0.19**	**0.019 B**	**0.070**	**0.021**	**0.019 B**	**0.0216**	0.02 U	**0.044**	0.02 U	0.02 U	**0.03**	**0.033**	**0.0063 B**	**0.017 B**	**0.026**	0.02 U	**0.012 B**

Notes:

-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-01D			TLC-01S		TLC-02S					
		Sample Date	1/18/2002	7/18/2001	1/23/2001	1/18/2002	1/23/2001	4/4/2002	3/8/2002	3/8/2002	1/18/2002	7/17/2001	1/23/2001
		Sample ID	TLC01D-011802	TLC01D-071801	TLC01D 012301	TLC01S-011802	TLC01S 012301	TLC02S-040402	TLC2S-030802	TLC2S-030802 SOLUBLE	TLC02S-011802	TLC02S-071701	TLC02S 012301
		Unit											
Volatile Organic Compounds													
Acetone	4	mg/L	0.5 U	**0.5 R**	0.25 U	**0.032**	**0.035**	--	**3.8**	--	5 U	0.62 U	2.5 U
Benzene	0.005	mg/L	**1.8**	**2**	**1.8**	**0.099**	**0.00036 JB**	**20**	**9.8**	--	**21**	**25 D**	**21**
Carbon Disulfide	4	mg/L	0.02 U	0.02 U	0.01 U	0.001 U	0.001 U	--	0.05 U	--	0.2 U	0.025 U	0.1 U
Dichloromethane	0.005	mg/L	0.1 U	0.1 U	0.05 U	0.005 U	0.005 U	1 U	0.25 U	--	1 U	0.12 U	0.5 U
Ethylbenzene	0.7	mg/L	**0.46**	**0.24**	**0.24**	**0.012**	**0.00033 J**	**1.4**	**0.52**	--	**0.86**	**1.4**	**1.2**
Toluene	1	mg/L	**0.26**	**0.21**	**0.46**	**0.016**	**0.0004 J**	0.2 U	0.05 U	--	0.2 U	**0.041**	0.1 U
Trichloroethylene	0.005	mg/L	0.02 U	0.02 U	0.01 U	0.001 U	0.001 U	0.2 U	0.05 U	--	0.2 U	**0.012 J**	0.1 U
Xylenes, total	2	mg/L	**0.39**	**0.24**	**0.25**	**0.012**	**0.00061 J**	--	**0.36**	--	**0.57**	**1.3**	**0.93**
Semivolatile Organic Compounds													
2-Methylnaphthalene	*	mg/L	**0.19 DJ**	**0.081**	**0.09**	--	**0.00041 J**	--	**1.5**	--	**0.77 DJ**	**0.94**	0.01 U
Acenaphthene	2	mg/L	**0.055**	**0.021 J**	**0.015**	--	**0.00081 J**	**0.17 J**	**0.22**	--	**0.069**	**0.092**	0.01 U
Acenaphthylene	0.0002	mg/L	**0.015**	**0.0098 J**	**0.028**	--	0.01 U	0.25 U	**0.014 J**	--	0.01 U	0.05 U	0.01 U
Anthracene	0.0002	mg/L	**0.0044 J**	**0.002 J**	**0.0019 J**	--	0.01 U	**0.018 J**	**0.076 J**	--	**0.0079 J**	**0.0078 J**	0.01 U
Benz(a)anthracene	0.0001	mg/L	**0.00051 J**	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.024 J**	--	**0.00062 J**	0.05 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.014 J**	--	0.01 U	0.05 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.011 J**	--	0.01 U	0.05 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.05 UJ	0.01 U	--	0.01 U	0.25 U	**0.01 J**	--	0.01 U	0.05 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.0086 J**	--	0.01 U	0.05 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.016 J**	--	0.01 U	0.05 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.05 UJ	0.01 U	--	0.01 U	0.25 U	0.1 U	--	0.01 U	0.05 U	0.01 U
Dibenzofuran	0.001	mg/L	**0.0056 J**	**0.0024 J**	**0.003 J**	--	0.01 U	--	**0.052 J**	--	**0.017**	**0.021 J**	0.01 U
Fluoranthene	1	mg/L	**0.0032 J**	0.05 U	0.01 U	--	0.01 U	0.25 U	**0.055 J**	--	**0.0024 J**	**0.0023 J**	0.01 U
Fluorene	1	mg/L	**0.026**	**0.01 J**	**0.011**	--	0.01 U	**0.074 J**	**0.11**	--	**0.029**	**0.039 J**	0.01 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.05 UJ	0.01 U	--	0.01 U	0.25 U	**0.014 J**	--	0.01 U	0.05 U	0.01 U
Naphthalene	0.02	mg/L	**1.7 D**	**0.67**	**1.1 D**	--	**0.0056 J**	**11 D**	**13 D**	--	**9.5 D**	**12 D**	0.01 U
Phenanthrene	*	mg/L	**0.026**	**0.01 J**	**0.012**	--	0.01 U	**0.067 J**	**0.2**	--	**0.028**	**0.031 J**	0.01 U
Pyrene	1	mg/L	**0.0038 J**	0.05 U	**0.0019 J**	--	0.01 U	**0.014 J**	**0.045 J**	--	**0.0028 J**	0.05 U	0.01 U
Inorganic Compounds													
Aluminum (fume or dust)	*	mg/L	--	**1.1**	**2.5 N**	--	**1.1 N**	--	--	--	**0.039 B**	**0.06 BN**	**0.44 N**
Antimony	0.01	mg/L	--	0.02 U	0.02 U	--	0.02 U	--	--	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	--	0.01 U	**0.0033 B**	--	0.01 U	--	--	--	0.01 U	**0.0065 B**	**0.0035 B**
Barium	2	mg/L	--	**0.31**	**0.36**	--	**0.38**	--	--	--	**0.67**	**0.56**	**0.63**
Beryllium	0.004	mg/L	--	0.004 U	0.004 U	--	0.004 U	--	--	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	--	0.005 U	**0.0022 B**	--	**0.0015 B**	--	--	--	0.005 U	0.005 U	**0.00078 B**
Calcium metal	*	mg/L	--	**18**	**17**	--	**18**	--	--	--	**200**	**170**	**200**
Chromium	0.1	mg/L	--	**0.0023 J**	**0.0074 B**	--	**0.0021 B**	--	--	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	--	**0.004 J**	**0.0057 B**	--	**0.0078 B**	--	--	--	**0.0052 B**	**0.0042 B**	**0.0063 B**
Copper	1.3	mg/L	--	0.0012 U	**0.022**	--	**0.0060 B**	--	--	--	**0.002 B**	**0.0017 B**	**0.0038 B**
Cyanide	0.2	mg/L	--	**0.026**	**0.028**	--	**0.045**	--	**1.5**	**1.4**	**1.4**	**1.3**	**0.77**
Iron	*	mg/L	--	**55**	**71**	--	**49**	--	--	--	**20**	**20**	**23**
Lead	0.015	mg/L	--	0.005 U	**0.0024 B**	--	**0.0022 B**	--	--	--	0.005 U	0.005 U	**0.0025 B**
Magnesium	*	mg/L	--	**20**	**19**	--	**26**	--	--	--	**25**	**22**	**26**
Manganese	*	mg/L	--	**0.92**	**1.0**	--	**1.9**	--	--	--	**1.6**	**1.6**	**1.8**
Mercury	0.002	mg/L	--	0.0002 U	0.00020 U	--	0.00020 U	--	--	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	--	0.04 U	**0.019 B**	--	**0.013 B**	--	--	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	--	**3.5**	**2.8**	--	**3.5**	--	--	--	**10**	**9.7**	**9.4**
Selenium	0.05	mg/L	--	0.01 U	0.01 U	--	0.01 U	--	--	--	**0.0058 B**	0.01 U	0.01 U
Sodium	*	mg/L	--	**55**	**52**	--	**21**	--	--	--	**16**	**14**	**17**
Thallium	0.002	mg/L	--	0.002 U	0.002 U	--	0.002 UW	--	--	--	0.002 UW	0.002 UN	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	--	0.01 U	**0.0051 B**	--	0.01 U	--	--	--	**0.0031 B**	0.01 U	**0.0025 B**
Zinc	2	mg/L	--	**0.0086 J**	**0.015 B**	--	**0.0095 B**	--	--	--	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-03D				TLC-03S				
		Sample Date	1/21/2002	1/21/2002	7/13/2001	1/23/2001	3/8/2002	3/8/2002	1/21/2002	7/13/2001	1/23/2001
		Sample ID	TLC03D-012102	TLC03SDUP-012102	TLC03D-071301	TLC03D 012301	TLC03S-030802 SOLUBLE	TLC3S-030802	TLC03S-012102	TLC03S-071301	TLC03S-012301
		Unit									
Volatile Organic Compounds											
Acetone	4	mg/L	**0.021 J**	0.025 U	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	**0.0006 J**	**0.1**	0.001 U	0.001 U	--	**0.19 D**	**0.12**	0.001 U	**0.012**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U	**0.0012 JB**
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	**0.00013 J**
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	--	0.002 U	0.002 U	0.002 U	0.002 U
Semivolatile Organic Compounds											
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthene	2	mg/L	0.01 U	**0.024**	0.01 U	0.01 U	--	**0.021**	**0.025**	**0.019**	**0.025**
Acenaphthylene	0.0002	mg/L	0.01 U	**0.001 J**	0.01 U	0.01 U	--	**0.00098 J**	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	**0.00074 J**	0.01 U	0.01 U	--	0.01 U	**0.00085 J**	0.01 U	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.00047 J**	**0.00041 J**	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.01 U	**0.00054 J**	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene	1	mg/L	0.01 U	**0.0022 J**	**0.00037 J**	0.01 U	--	**0.0021 J**	**0.0023 J**	**0.0013 J**	**0.0029 J**
Fluorene	1	mg/L	0.01 U	**0.011**	0.01 U	0.01 U	--	**0.006 J**	**0.012**	**0.0064 J**	**0.011**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U
Pyrene	1	mg/L	0.01 U	**0.002 J**	0.01 U	0.01 U	--	**0.0017 J**	**0.0021 J**	**0.0013 J**	**0.0025 J**
Inorganic Compounds											
Aluminum (fume or dust)	*	mg/L	0.031 U	0.2 U	**0.37**	**16 N**	--	--	0.2 U	**0.053 B**	**0.3**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	--	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.072**	**0.8**	**0.067**	**0.092**	--	--	**0.79**	**0.077**	**0.32**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	--	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**53**	**120**	**53**	**53**	--	--	**120**	**100**	**100**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	**0.016**	--	--	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	**0.0045 B**	**0.0019 B**	**0.0042 B**	**0.0071 B**	--	--	**0.0017 B**	**0.0017 B**	**0.002 B**
Copper	1.3	mg/L	0.0019 U	**0.0014 B**	0.02 U	**0.016 B**	--	--	**0.0016 B**	0.02 U	**0.00099 B**
Cyanide	0.2	mg/L	0.01 U	**0.37**	0.01 U	0.01 U	**0.55**	**0.63**	**0.31**	**0.11**	**0.064**
Iron	*	mg/L	**0.19**	**8.7**	**0.31**	**4.3**	--	--	**8.5**	**0.49**	**8.8**
Lead	0.015	mg/L	0.0024 U	**0.0024 B**	0.005 U	**0.0067**	--	--	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**33**	**20**	**32**	**32**	--	--	**20**	**18**	**17**
Manganese	*	mg/L	**0.68**	**0.26**	**0.71**	**0.75**	--	--	**0.25**	**0.12**	**0.31**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.00020 U	--	--	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	**0.0087 B**	--	--	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**19**	**5.3**	**19**	**19**	--	--	**5.2**	**3.1**	**4.1**
Selenium	0.05	mg/L	0.01 U	**0.005 B**	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**80**	**13**	**80**	**81**	--	--	**13**	**15**	**12**
Thallium	0.002	mg/L	0.002 UJ	0.002 U	0.002 UW	0.002 U	--	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	**0.016**	--	--	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.012 B**	**0.0072 B**	0.02 U	**0.017 B**	--	--	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-04D							TLC-04S						
		Sample Date	7/18/2003	1/15/2003	7/15/2002	1/15/2002	7/12/2001	1/22/2001	1/22/2001	1/20/2004	7/18/2003	1/15/2003	7/15/2002	1/15/2002	7/12/2001	1/22/2001
		Sample ID	TLC-4D-Q3-03	TLC04D-011503	TLC04D-071502	TLC4D-011502	TLC04D-071201	010104D 012201	TLC04D 012201	TLC-4S-Q1-04	TLC-4S-Q3-03	TLC04S-011503	TLC04S-071502	TLC4S-011502	TLC04S-07120	TLC04S 012201
		Unit														
Volatile Organic Compounds																
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.25 U	0.025 U	0.12 U	0.5 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.12 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	**0.0022 J**	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U
Carbon Disulfide	4	mg/L	**0.004**	0.001 UJ	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.005 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 UJ	**0.00043 J**	0.005 U	0.05 U	0.005 U	0.025 U	0.1 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.025 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	**0.00019 J**	0.001 U	0.001 U	0.005 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	**0.00055 J**	0.001 U	0.001 U	0.005 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.01 U	0.001 U	0.005 U	0.02 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.02 U	0.002 U	0.01 U	0.04 U	0.002 U	0.002 U	**0.00036 J**	0.002 U	0.002 U	0.01 U
Semivolatile Organic Compounds																
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthene	2	mg/L	0.01 U	**0.00039 J**	**0.00043 J**	0.01 U	**0.00046 J**	0.01 U	**0.00055 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0015 J**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	**0.00067 J**	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00029**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluorene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00079 J**
Pyrene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Inorganic Compounds																
Aluminum (fume or dust)	*	mg/L	**2.6**	**2.7**	**2.9**	**0.059 BN**	**0.13 B**	**0.91**	**0.53**	0.2 U	**0.8**	**0.91**	**4.5**	**0.30 N**	**0.87**	**6.0**
Antimony	0.01	mg/L	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.14**	**0.15**	**0.13**	**0.13**	**0.14**	**0.14**	**0.14**	**0.19**	**0.17**	**0.16**	**0.18**	**0.18**	**0.17**	**0.19**
Beryllium	0.004	mg/L	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**41**	**44**	**43**	**43**	**45**	**42**	**40**	**50**	**43**	**38**	**37**	**38**	**39**	**37**
Chromium	0.1	mg/L	0.01 U	0.0033 U	**0.0028 B**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.0043 B**	0.010 U	0.01 U	**0.0060 B**
Cobalt	*	mg/L	0.01 U	**0.0016 B**	**0.0015 B**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0027 B**	**0.002 B**	0.010 U	0.01 U	**0.0022 B**
Copper	1.3	mg/L	0.02 U	0.0017 U	**0.002 B**	0.020 U	0.02 U	**0.0016 B**	**0.0033 B**	0.02 U	0.02 U	0.0014 U	**0.0024 B**	0.020 U	0.02 U	**0.0026 B**
Cyanide	0.2	mg/L	0.015 U	0.010 UJ	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	**3.1**	**3.6**	**2.5 N**	**2.1 N**	**3.3**	**4.2 N**	**3.9 N**	**0.48**	**1**	**0.79**	**2.8 N**	**0.70 N**	**0.53**	**3.9 N**
Lead	0.015	mg/L	0.005 U	0.0018 U	**0.002 B**	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	**0.002 B**	0.0050 U	0.005 U	**0.0017 B**
Magnesium	*	mg/L	**26**	**25**	**24**	**25**	**26**	**24**	**23**	**26**	**25**	**20**	**19**	**20**	**21**	**20**
Manganese	*	mg/L	**1.4**	**1.4**	**1.3**	**1.4**	**1.4**	**1.3**	**1.3**	**1.6**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**
Mercury	0.002	mg/L	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.00020 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	**9.5**	**10**	**10**	**11**	**11**	**10**	**10**	**11**	**9.6**	**9.6**	**9.9**	**9.8**	**10**	**9.9**
Selenium	0.05	mg/L	**0.02**	0.010 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	0.010 U	**0.0044 B**	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	**80**	**86**	**80**	**83**	**83**	**81**	**78**	**87**	**79**	**76**	**77**	**78**	**78**	**77**
Thallium	0.002	mg/L	0.002 U	0.0020 UJ	0.002 UWN	0.0020 U	0.002 UW	0.002 U	0.002 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.0020 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.0028 B**	**0.0026 B**	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	**0.0090 B**	**0.019**	**0.0064 B**	**0.0088 B**	**0.019**
Zinc	2	mg/L	**0.03**	0.020 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.0078 B**	**0.0069 B**	0.020 U	0.02 U	**0.0093 B**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-05D							TLC-05S							
		Sample Date	1/20/2004	7/18/2003	1/15/2003	7/15/2002	1/15/2002	7/11/2001	1/19/2001	1/20/2004	7/18/2003	1/15/2003	7/15/2002	7/15/2002	1/15/2002	7/11/2001	1/19/2001
		Sample ID	TLC-5D-Q1-04	TLC-5D-Q3-03	TLC05D-011503	TLC05D-071502	TLC05D-011502	TLC05D-071101	TLC05D-011901	TLC-5S-Q1-04	TLC-5S-Q3-03	TLC05S-011503	TLC05S-071502 DUP	TLC05S-071502	TLC05S-011502	TLC05S-071101	TLC05S011901
		Unit															
Volatile Organic Compounds																	
Acetone	4	mg/L	0.12 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.05 U	0.25 U	0.025 U	0.025 U	**0.091**	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0003 J**	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon Disulfide	4	mg/L	0.005 U	0.001 U	0.001 UJ	**0.00039 J**	0.001 U	0.001 U	0.002 U	0.01 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.025 U	0.005 U	0.005 UJ	**0.00074 J**	0.005 U	0.005 U	0.01 U	0.05 U	0.005 U	0.005 UJ	**0.00048 J**	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.005 U	0.001 U	0.001 U	**0.00036 J**	0.001 U	0.001 U	0.002 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	1	mg/L	0.005 U	0.001 U	0.001 U	**0.00067 J**	0.001 U	0.001 U	0.002 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.005 U	**0.004**	**0.0036**	**0.0044**	**0.0031**	**0.0028**	**0.0033**	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.01 U	0.002 U	0.002 U	**0.00072 J**	0.002 U	**0.00046 J**	0.004 U	0.02 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Semivolatile Organic Compounds																	
2-Methylnaphthalene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthene	2	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.00028 J**	0.01 U
Acenaphthylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene	1	mg/L	**0.00035**	0.01 U	**0.00036 J**	0.01 U	0.01 U	0.01 U	**0.00058 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluorene	1	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene	*	mg/L	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Pyrene	1	mg/L	**0.00047**	0.01 U	**0.00072 J**	0.01 U	0.01 U	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Inorganic Compounds																	
Aluminum (fume or dust)	*	mg/L	**0.29**	**10**	**0.93**	**0.99**	**37**	**5.5**	**4.0**	0.2 U	0.2 U	**0.13 B**	**0.049 B**	**0.052 B**	**0.096 BN**	0.2 U	**0.17 B**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Barium	2	mg/L	**0.16**	**0.19**	**0.16**	**0.17**	**0.29**	**0.19**	**0.13**	**0.077**	**0.08**	**0.068**	**0.073**	**0.073**	**0.071**	**0.068**	**0.068**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.0040 U	0.004 U	**0.0018 B**	**0.00079 B**	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U	0.0040 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U	0.0050 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**31**	**27**	**29**	**28**	**27**	**25**	**27**	**40**	**41**	**36**	**38**	**38**	**36**	**37**	**36**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.0019 U	0.01 U	**0.052**	**0.0074 BN**	**0.0057 B**	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 UN	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	**0.0054 B**	**0.0065 B**	**0.014**	**0.0067 B**	**0.0043 B**	0.01 U	0.01 U	**0.0034 B**	**0.0033 B**	**0.0034 B**	**0.0029 B**	**0.0028 B**	**0.0025 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.0011 U	**0.00097 B**	**0.015 B**	**0.0023 BN**	**0.0033 B**	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.020 U	**0.005 BN**	**0.0012 B**
Cyanide	0.2	mg/L	0.01 U	0.015 U	0.010 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.010 UJ	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Iron	*	mg/L	**3.4**	**12**	**5.6**	**4.5 N**	**20**	**8.6**	**4.7 N**	**0.076**	**0.19**	**0.30**	**0.19 N**	**0.18 N**	**0.10 N**	**0.79**	**0.76 N**
Lead	0.015	mg/L	0.005 U	**0.02**	0.0023 U	0.005 U	**0.027**	**0.0069**	**0.0091**	0.005 U	0.005 U	0.0024 U	0.005 U	0.005 U	0.0050 U	**0.0018 B**	0.005 U
Magnesium	*	mg/L	**17**	**15**	**16**	**15**	**16**	**14**	**15**	**23**	**27**	**21**	**23**	**23**	**22**	**20**	**20**
Manganese	*	mg/L	**1.4**	**1.3**	**1.3**	**1.4**	**1.5**	**1.3 N**	**1.4**	**2**	**2.1**	**1.7**	**1.9**	**1.9**	**1.8**	**1.8 N**	**1.9**
Mercury	0.002	mg/L	0.0002 U	0.0002 UJ	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.0002 UJ	**0.000080 B**	0.0002 U	0.0002 U	0.00020 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.040 U	0.04 U	**0.027 B**	**0.0058 B**	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U	0.040 U	0.04 U	0.04 U
Potassium	*	mg/L	**6.8**	**5.8**	**6.1**	**6.3**	**6.6**	**5.9**	**6.4**	**7.2**	**6.9**	**6.3**	**6.9**	**6.9**	**6.5**	**6.4**	**6.2**
Selenium	0.05	mg/L	0.01 U	0.01 UJ	0.010 U	**0.0076 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Sodium	*	mg/L	**79**	**69**	**75**	**76**	**72**	**70**	**74**	**77**	**78**	**70**	**77**	**77**	**75**	**66**	**71**
Thallium	0.002	mg/L	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.002 U	0.002 U	0.002 U	0.001 U	0.002 U	0.0020 UJ	0.002 UWN	0.002 UWN	0.0020 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.02**	0.010 U	0.01 U	**0.055**	**0.0081 B**	**0.0044 B**	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U	0.010 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	**0.04**	0.020 U	0.02 U	**0.052**	**0.011 B**	**0.0098 B**	0.02 U	**0.18**	0.020 U	0.02 U	0.02 U	0.020 U	**0.0063 B**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-07D					TLC-07S						
		Sample Date	1/21/2003	7/16/2002	1/17/2002	7/12/2001	1/24/2001	1/21/2004	7/19/2003	1/21/2003	7/16/2002	1/16/2002	7/11/2001	1/24/2001
		Sample ID	TLC07D-012103	TLC07D-071602	TLC07D-011702	TLC07D-071201	TLC07D 012401	TLC-7S-Q1-04	TLC-7S-Q3-03	TLC07S-012103	TLC07S-071602	TLC07S-011602	TLC07S-071101	TLC07S 012401
		Unit												
Volatile Organic Compounds														
Acetone	4	mg/L	**0.038**	0.025 U	**0.018 J**	**0.062**	**0.048**	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	**0.00014 J**	0.001 U	0.001 U	**0.00023 J**	**0.00058 J**	0.001 U	0.001 U	**0.00014 J**	0.001 U	0.001 U	**0.00024 J**	**0.00072 J**
Carbon Disulfide	4	mg/L	**0.00037 J**	**0.00098 J**	0.001 U	**0.00036 J**	0.001 U	0.001 U	0.001 U	0.001 U	**0.0037**	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	**0.0003 J**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	**0.00011 J**	0.001 U	0.001 U	0.001 U	**0.00056 J**	0.001 U	0.001 U	**0.00021 J**	**0.00029 J**	0.001 U	0.001 U	**0.00016 J**
Toluene	1	mg/L	**0.00078 J**	0.001 U	**0.00037 J**	**0.00091 J**	**0.00075 J**	0.001 U	0.001 U	**0.00032 J**	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	**0.001 J**	**0.00066 J**	0.002 U	0.002 U	**0.00083 J**	0.002 U	0.002 U	**0.00061 J**	**0.0012 J**
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00087 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0042 J**
Acenaphthene	2	mg/L	**0.0016 J**	**0.00093 J**	--	**0.0014 J**	**0.0033 J**	**0.0078**	**0.026**	**0.011**	**0.0042 J**	**0.0055 J**	**0.018**	**0.03**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00064 J**	**0.0002**	0.01 U	0.01 U	0.01 U	0.01 U	**0.0022 J**	**0.0035 J**
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00045 J**	**0.00022**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.01 U	0.01 U	--	0.01 U	**0.00061 J**	0.0002 U	0.01 U	**0.00088 J**	0.01 U	**0.00044 J**	**0.0039 J**	**0.0071 J**
Fluoranthene	1	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0011 J**	**0.0029**	0.01 U	**0.0023 J**	**0.0016 J**	**0.0016 J**	**0.0031 J**	**0.004 J**
Fluorene	1	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0014 J**	**0.0025**	0.01 U	**0.0042 J**	**0.0017 J**	**0.0015 J**	**0.0064 J**	**0.013**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0011 J**	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0058 J**
Phenanthrene	*	mg/L	0.01 U	**0.00043 J**	--	0.01 U	**0.0018 J**	0.0002 U	0.01 U	**0.00045 J**	0.01 U	**0.00041 J**	**0.011**	**0.016**
Pyrene	1	mg/L	0.01 U	0.01 U	--	**0.00055 J**	**0.0015 J**	**0.0026**	0.01 U	**0.0021 J**	**0.0014 J**	**0.0014 J**	**0.0026 J**	**0.0035 J**
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	**0.67**	--	--	**0.67**	--	0.2 U	**0.3**	**0.1 B**	**0.56**	0.036 U	**0.21**	**0.16 B**
Antimony	0.01	mg/L	0.02 U	--	--	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	--	--	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.37**	--	--	**0.37**	--	**0.38**	**0.43**	**0.39**	**0.34**	**0.35**	**0.4**	**0.4**
Beryllium	0.004	mg/L	0.004 U	--	--	0.004 U	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**21**	--	--	**21**	--	**84**	**83**	**86**	**75**	**77**	**84**	**90**
Chromium	0.1	mg/L	0.01 U	--	--	**0.0022 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UN	0.01 U
Cobalt	*	mg/L	**0.0042 B**	--	--	**0.006 B**	--	0.01 U	0.01 U	**0.0045 B**	**0.0088 B**	**0.0089 B**	**0.0047 B**	**0.0053 B**
Copper	1.3	mg/L	**0.0045 B**	--	--	**0.0053 B**	--	0.02 U	0.02 U	**0.0024 B**	**0.00099 B**	0.02 U	0.02 UN	0.02 U
Cyanide	0.2	mg/L	--	--	--	0.01 U	--	**0.012**	**0.05**	**0.012**	0.01 U	**0.027**	0.01 U	**0.017**
Iron	*	mg/L	**13**	--	--	**17**	--	**39**	**25**	**31**	**34**	**33**	**33**	**29**
Lead	0.015	mg/L	0.005 U	--	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**13**	--	--	**13**	--	**67**	**68**	**67**	**63**	**64**	**66**	**67**
Manganese	*	mg/L	**1.7**	--	--	**1.5**	--	**3.4**	**2.1**	**2.8**	**3.9**	**4**	**2.6 N**	**2.4**
Mercury	0.002	mg/L	**0.000092 B**	--	--	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	--	--	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.4**	--	--	**2.7**	--	**4**	**6.4**	**5.6**	**3.9**	**3.5**	**5.9**	**6.5**
Selenium	0.05	mg/L	0.01 U	--	--	0.01 U	--	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**28**	--	--	**26**	--	**53**	**46**	**53**	**51**	**51**	**54**	**51**
Thallium	0.002	mg/L	0.002 UW	--	--	0.002 UW	--	0.001 U	0.002 U	0.002 UW	0.002 UW	0.002 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	--	--	**0.003 B**	--	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	**0.028**	--	--	0.02 U	--	0.02 U	**0.03**	**0.022**	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
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UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-08D					TLC-08S					
		Sample Date	1/22/2003	7/16/2002	1/16/2002	7/13/2001	1/19/2001	1/18/2001	1/17/2002	7/16/2002	1/21/2004	7/19/2003	1/21/2003
		Sample ID	TLC08D-012203	TLC08D-071602	TLC08D-011602	TLC08D-071301	TLC08D 011901	TLC08S 011801	TLC08S-011702	TLC08S-071602	TLC-8S-Q1-04	TLC-8S-Q3-03	TLC08S-012103
		Unit											
Volatile Organic Compounds													
Acetone	4	mg/L	0.025 U	0.025 U	**0.024 J**	0.025 U	0.025 U	0.025 U	0.025 U	**0.036**	1.2 U	0.63 U	0.05 U
Benzene	0.005	mg/L	**0.00064 J**	**0.00074 J**	**0.004**	**0.0015**	**0.0025**	**0.18**	**0.11**	**0.07**	**0.19**	**0.18**	**0.24**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	**0.00046 J**	**0.00059 J**	0.001 U	0.001 U	0.001 U	0.05 U	0.025 U	0.002 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00034 J**	0.25 U	0.13 U	0.01 U
Ethylbenzene	0.7	mg/L	**0.0002 J**	**0.00048 J**	**0.0039**	**0.004**	**0.0064**	**0.16**	**0.15**	**0.054**	**0.16**	**0.15**	**0.24**
Toluene	1	mg/L	0.001 U	**0.00073 J**	**0.0003 J**	**0.00069 J**	**0.00036 J**	**0.0035**	**0.0029**	**0.0014**	0.05 U	0.025 U	**0.0044**
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.05 U	0.025 U	0.002 U
Xylenes, total	2	mg/L	**0.001 J**	**0.0014 J**	**0.0033**	**0.0042**	**0.0055**	**0.079**	**0.073**	**0.023**	0.5 U	0.05 U	**0.092**
Semivolatile Organic Compounds													
2-Methylnaphthalene	*	mg/L	**0.0078 J**	**0.036**	--	0.01 U	0.01 U	**0.62**	**0.45 J**	**0.37 D**	**0.34**	**0.53 J M**	**0.44**
Acenaphthene	2	mg/L	**0.019**	**0.031**	--	**0.0087 J**	**0.0027 J**	**0.36**	**0.31 J**	**0.27 D**	**0.22**	**0.37**	**0.25**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0034 J**	**0.0035 J**	0.5 U	0.01 U	0.0002 U	0.01 U	0.05 U
Anthracene	0.0002	mg/L	**0.0015 J**	**0.0034 J**	--	**0.0022 J**	0.01 U	**0.02 J**	0.5 U	**0.016**	**0.022**	**0.025**	**0.016 J**
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0083 J**	0.5 U	**0.0016 J**	**0.0047**	0.01 U	**0.0042 J**
Benzo(a)pyrene	0.0002	mg/L	0.01 U	**0.00044 J**	--	0.01 U	0.01 U	**0.0071 J**	0.5 U	**0.0012 J**	**0.0018**	0.01 U	0.05 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0062 J**	0.5 U	0.01 U	0.0002 U	0.01 U	0.05 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	**0.0012 J**	--	0.01 U	0.01 U	**0.0075 J**	0.5 U	0.01 U	**0.0011**	0.01 U	0.05 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0063 J**	0.5 U	**0.001 J**	**0.0033**	0.01 U	0.05 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0093 J**	0.5 U	**0.0016 J**	**0.0036**	0.01 U	**0.004 J**
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	**0.00092 J**	--	0.01 U	0.01 U	**0.005 J**	0.5 U	0.01 U	0.0002 U	0.01 U	0.05 U
Dibenzofuran	0.001	mg/L	**0.0012 J**	**0.0023 J**	--	0.01 U	0.01 U	**0.021 J**	**0.016 J**	**0.013**	**0.02**	**0.022**	**0.014 J**
Fluoranthene	1	mg/L	**0.001 J**	**0.0016 J**	--	**0.0014 J**	0.01 U	**0.012 J**	0.5 U	**0.0074 J**	**0.016**	**0.018**	**0.012 J**
Fluorene	1	mg/L	**0.0058 J**	**0.011**	--	**0.0062 J**	0.01 U	**0.11**	**0.066 J**	**0.064**	**0.067**	**0.1**	**0.072**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	**0.00094 J**	--	0.01 U	0.01 U	**0.0046 J**	0.5 U	0.01 U	**0.00099**	0.01 U	0.05 U
Naphthalene	0.02	mg/L	**0.0031 J**	**0.019**	--	0.01 U	0.01 U	**3.8 D**	**4.1**	**2.6 D**	**6.7**	**8.9 J M**	**3.7 D**
Phenanthrene	*	mg/L	**0.0046 J**	**0.016**	--	**0.0078 J**	0.01 U	**0.11**	**0.083 J**	**0.078**	**0.091**	**0.12**	**0.085**
Pyrene	1	mg/L	**0.0012 J**	**0.0017 J**	--	**0.0016 J**	0.01 U	**0.015 J**	0.5 U	**0.011**	**0.02**	**0.023**	**0.016 J**
Inorganic Compounds													
Aluminum (fume or dust)	*	mg/L	**0.055 B**	**0.63**	--	**0.06 B**	**1.3**	**0.18 B**	**1.8**	--	**0.77**	**1.9**	**10**
Antimony	0.01	mg/L	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	**0.004 B**	0.01 U	--	0.01 U	**0.0037 B**	0.01 U	**0.0034 B**	--	0.01 U	0.01 U	**0.0088 B**
Barium	2	mg/L	**0.26**	**0.26**	--	**0.19**	**0.17**	**0.49**	**0.51**	--	**0.48**	**0.53**	**0.6**
Beryllium	0.004	mg/L	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	--	0.005 U	**0.0035 B**	**0.0011 B**	0.005 U	--	0.005 U	**0.006**	**0.0013 B**
Calcium metal	*	mg/L	**15**	**14**	--	**13**	**14**	**130**	**140**	--	**120**	**120**	**130**
Chromium	0.1	mg/L	0.01 U	0.01 U	--	0.01 U	**0.0025 B**	0.01 U	**0.0022 B**	--	0.01 U	0.01 U	**0.012**
Cobalt	*	mg/L	**0.0021 B**	**0.0022 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	**0.0043 B**
Copper	1.3	mg/L	**0.0031 B**	**0.0067 B**	--	0.02 U	**0.015 B**	**0.0010 B**	**0.0041 B**	--	0.02 U	0.02 U	**0.022**
Cyanide	0.2	mg/L	0.01 U	--	--	0.01 U	0.01 U	**0.011**	**0.01 B**	--	**0.012**	0.015 U	**0.015**
Iron	*	mg/L	**8.7**	**10**	--	**10**	**10 N**	**37**	**40**	--	**36**	**30**	**48**
Lead	0.015	mg/L	0.005 U	0.005 U	--	0.005 U	0.005 U	**0.0017 B**	**0.03**	--	**0.005**	**0.03**	**0.086**
Magnesium	*	mg/L	**11**	**10**	--	**9.3**	**9.8**	**36**	**39**	--	**41**	**44**	**43**
Manganese	*	mg/L	**0.45**	**0.43**	--	**0.41**	**0.43**	**2.1**	**2.6 N**	--	**2.8**	**2.6**	**2.9**
Mercury	0.002	mg/L	**0.000087 B**	0.0002 U	--	0.0002 U	0.00020 U	0.00020 U	0.0002 U	--	0.0002 U	0.0002 U	**0.00028**
Nickel	0.1	mg/L	0.04 U	0.04 U	--	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	**0.0071 B**
Potassium	*	mg/L	**2.1**	**2.1**	--	**2.0**	**2.3**	**18**	**16 N**	--	**18**	**17**	**20**
Selenium	0.05	mg/L	0.01 U	**0.0047 B**	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	**0.02**	0.01 U
Sodium	*	mg/L	**21**	**20**	--	**19**	**20**	**33**	**32**	--	**31**	**33**	**39**
Thallium	0.002	mg/L	0.002 U	0.002 UW	--	0.002 U	0.002 U	0.002 U	0.002 U	--	0.001 U	0.002 U	0.002 UW
Vanadium (fume or dust)	0.2	mg/L	0.01 U	**0.0022 B**	--	0.01 U	**0.0027 B**	0.01 U	**0.0048 B**	--	0.01 U	**0.02**	**0.024**
Zinc	2	mg/L	**0.056**	0.02 U	--	0.02 U	**0.011 B**	**0.0076 B**	**0.035**	--	0.02 U	**0.09**	**0.19**

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-09D											
		Sample Date	7/16/2004	7/16/2004	1/21/2004	1/21/2004	7/19/2003	7/19/2003	1/21/2003	1/21/2003	7/16/2002	1/16/2002	1/18/2001	7/11/2001
		Sample ID	TLC-9D-Q3-04	TLC-9D-Q3-04 DUP	TLC-9D-Q1-04	TLC-9D-Q1-04 DUP	TLC-9D-Q3-03	TLC-9D-Q3-03 DUP	TLC09D-012103	TLC09D-012103 DUP	TLC09D-071602	TLC09D-011602	TLC09D 011801	TLC09D-071101
		Unit												
Volatile Organic Compounds														
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00012 J**	**0.00026 J**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00017 J**	0.001 U	0.001 U	**0.00042 J**	0.001 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0003 J**	**0.00035 J**	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	**0.0006 J**	**0.00052 J**	**0.00039 J**	**0.0007 J**	**0.00078 J**	0.002 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	mg/L	**0.0013**	**0.0014**	**0.0024**	**0.003**	0.01 U	0.01 U	**0.006 J**	**0.0049 J**	**0.0037 J**	**0.0097 J**	**0.025**	**0.0063 J**
Acenaphthene	2	mg/L	**0.0072**	**0.0081**	**0.0095**	**0.012**	**0.012**	**0.013**	**0.018**	**0.017**	**0.011**	**0.026**	**0.045**	**0.02**
Acenaphthylene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene	0.0002	mg/L	**0.0016**	**0.0019**	**0.0019**	**0.0024**	0.01 U	0.01 U	**0.0036 J**	**0.0031 J**	**0.0029 J**	**0.0048 J**	**0.0065 J**	**0.0044 J**
Benz(a)anthracene	0.0001	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.0002 U	0.0002 U	**0.0018**	**0.0021**	0.01 U	0.01 U	**0.0052 J**	**0.0046 J**	**0.0032 J**	**0.0072 J**	**0.014**	**0.0062 J**
Fluoranthene	1	mg/L	**0.0018**	**0.002**	**0.0018**	**0.0019**	0.01 U	0.01 U	**0.0035 J**	**0.0031 J**	**0.0025 J**	**0.0047 J**	**0.005 J**	**0.004 J**
Fluorene	1	mg/L	**0.0032**	**0.0036**	**0.0038**	**0.0046**	0.01 U	0.01 U	**0.009 J**	**0.0077 J**	**0.0056 J**	**0.011**	**0.021**	**0.01**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	0.0002 U	0.0002 U	**0.00039**	**0.00054**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0011 J**	**0.018**	**0.0031 J**
Phenanthrene	*	mg/L	**0.0066**	**0.0074**	**0.0075**	**0.0087**	0.01 U	0.01 U	**0.016**	**0.014**	**0.011**	**0.022**	**0.029**	**0.02**
Pyrene	1	mg/L	**0.0013**	**0.0016**	**0.0014**	**0.0015**	0.01 U	0.01 U	**0.0025 J**	**0.0024 J**	**0.0019 J**	**0.0033 J**	**0.0034 J**	**0.0032 J**
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.1 B**	**1.2**	**0.051 B**	**0.089 B**	**0.72**
Antimony	0.01	mg/L	0.006 U	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	2	mg/L	**0.33**	**0.31**	**0.32**	**0.32**	**0.31**	**0.31**	**0.33**	**0.31**	**0.32**	**0.33**	**0.31**	**0.3**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.0006 B**
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0008 B**	0.005 U	0.005 U	**0.00094 B**	0.005 U
Calcium metal	*	mg/L	**18**	**17**	**20**	**20**	**18**	**19**	**19**	**19**	**18**	**20**	**22**	**19**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0024 B**	0.01 U	0.01 U	0.01 UN
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0024 B**	**0.0021 B**	**0.0025 B**	**0.0022 B**	0.01 U	**0.003 B**
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0015 B**	**0.0022 B**	**0.0017 B**	0.02 U	0.02 U	0.02 UN
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**37**	**35**	**32**	**32**	**29**	**29**	**40**	**39**	**39**	**41**	**34**	**40**
Lead	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0028 B**
Magnesium	*	mg/L	**15**	**14**	**13**	**13**	**14**	**15**	**17**	**16**	**16**	**18**	**13**	**15**
Manganese	*	mg/L	**2.1**	**1.9**	**1.7**	**1.7**	**1.6**	**1.7**	**2.1**	**2**	**2**	**2.1**	**1.8**	**2.1 N**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	**0.000089 B**	**0.00012 B**	0.0002 U	0.0002 U	0.00020 U	0.0002 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**2.2**	**2**	**2.9**	**3**	**2.5**	**2.5**	**2**	**1.9**	**1.9**	**1.9**	**2.7**	**1.8**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	**0.01**	0.01 U	0.01 U	**0.0065 B**	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**34**	**32**	**30**	**30**	**29**	**29**	**39**	**38**	**35**	**39**	**31**	**36**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 UW	0.002 UW	0.002 UW	0.002 U	0.002 UW	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0029 B**	0.01 U	0.01 U	**0.0023 B**
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.02**	**0.019 B**	**0.022**	**0.0069 B**	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-09S										
		Sample Date	7/16/2004	1/21/2004	7/19/2003	1/21/2003	7/16/2002	1/16/2002	1/16/2002	7/10/2001	7/10/2001	1/18/2001
		Sample ID	TLC-9S-Q3-04	TLC-9S-Q1-04	TLC-9S-Q3-03	TLC09S-012103	TLC09S-071602	TLC09S-011602	TLC09SDUP-011602	TLC09S-071001	TLC09SDUP-071001	TLC09S 011801
		Unit										
Volatile Organic Compounds												
Acetone	4	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	**0.00015 J**	**0.0028**	**0.0012**	**0.0015**	**0.0001 J**	**0.00013 J**	**0.00038 J**
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0007 J**	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	**0.00041 J**	0.001 U	0.001 U	0.001 U	0.001 U	**0.00036 J**	0.001 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	**0.00033 J**	0.001 U	0.001 U	**0.00031 J**	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	0.002 U	0.002 U	0.002 U	**0.00062 J**	0.002 U	**0.00069 J**	**0.00051 J**	0.002 U	**0.00052 J**	**0.00078 J**
Semivolatile Organic Compounds												
2-Methylnaphthalene	*	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	**0.0019 J**	**0.0024 J**	**0.0028 J**	**0.00093 J**	**0.00087 J**	**0.0099 J**
Acenaphthene	2	mg/L	**0.012**	**0.036**	**0.016**	**0.034**	**0.05**	**0.046**	**0.054**	**0.023**	**0.025**	**0.065**
Acenaphthylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.0024 J**
Anthracene	0.0002	mg/L	**0.0027**	**0.01**	0.01 U	**0.0088 J**	**0.014**	**0.01**	**0.011**	**0.0086 J**	**0.0086 J**	**0.018**
Benz(a)anthracene	0.0001	mg/L	0.0002 U	**0.00054**	0.01 U	**0.0012 J**	0.01 U	**0.00059 J**	**0.00053 J**	**0.0007 J**	**0.00064 J**	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	**0.00094 J**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.0002 U	**0.00038**	0.01 U	**0.0014 J**	0.01 U	**0.00049 J**	0.01 U	**0.0007 J**	**0.00057 J**	**0.0034 J**
Dibenzo(a,h)anthracene	0.003	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	**0.00038**	**0.01**	0.01 U	**0.014**	**0.022**	**0.018**	**0.021**	**0.01**	**0.01**	**0.027**
Fluoranthene	1	mg/L	**0.0022**	**0.0087**	0.01 U	**0.0084 J**	**0.01**	**0.0099 J**	**0.0093 J**	**0.0078 J**	**0.0077 J**	**0.016**
Fluorene	1	mg/L	**0.0072**	**0.027**	**0.012**	**0.023**	**0.034**	**0.028**	**0.033**	**0.022**	**0.022**	**0.048**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.0002 U	0.0002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	**0.00042**	**0.0006**	0.01 U	0.01 U	**0.001 J**	**0.00065 J**	**0.00079 J**	**0.0004 J**	0.01 U	0.01 U
Phenanthrene	*	mg/L	**0.005**	**0.039**	**0.021**	**0.041**	**0.064**	**0.054**	**0.061**	**0.042**	**0.043**	**0.075**
Pyrene	1	mg/L	**0.0016**	**0.0062**	0.01 U	**0.0066 J**	**0.0072 J**	**0.0068 J**	**0.0069 J**	**0.0058 J**	**0.0054 J**	**0.013**
Inorganic Compounds												
Aluminum (fume or dust)	*	mg/L	0.2 U	0.2 U	**1.1**	**1.3**	**0.21**	0.15 U	**0.067 B**	**0.14 B**	**0.43**	**0.23**
Antimony	0.01	mg/L	0.006 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	**0.0057 B**	0.01 U	0.01 U	0.01 U	**0.0068 B**	0.01 U	0.01 U
Barium	2	mg/L	**0.41**	**0.32**	**0.36**	**0.44**	**0.35**	**0.35**	**0.34**	**0.38**	**0.37**	**0.35**
Beryllium	0.004	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	**0.00083 B**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00078 B**
Calcium metal	*	mg/L	**180**	**99**	**140**	**190**	**86**	**120**	**110**	**160**	**150**	**160**
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	**0.0022 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	**0.0016 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	**0.0044 B**	**0.001 B**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.015 U	0.01 U	**0.0096 B**	**0.0056 B**	**0.0089 B**	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**17**	**30**	**14**	**34**	**30**	**28**	**28**	**23**	**23**	**23**
Lead	0.015	mg/L	0.005 U	0.005 U	**0.009**	**0.0097**	0.005 U	0.005 U	**0.0015 B**	0.005 U	0.005 U	0.005 U
Magnesium	*	mg/L	**36**	**35**	**32**	**37**	**31**	**33**	**32**	**33**	**32**	**35**
Manganese	*	mg/L	**1.4**	**1.6**	**1.3**	**2.8**	**1.1**	**1.2**	**1.2**	**1.2**	**1.2**	**1.1**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.0002 U	**0.00012 B**	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	*	mg/L	**13**	**9.6**	**10**	**9**	**9.8**	**9.4**	**9.2**	**12**	**11**	**10**
Selenium	0.05	mg/L	0.01 U	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**31**	**47**	**40**	**30**	**47**	**41**	**41**	**31**	**31**	**24**
Thallium	0.002	mg/L	0.001 U	0.001 U	0.002 U	0.002 UW	**0.0012 BW**	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	**0.01**	**0.003 B**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	2	mg/L	0.02 U	0.02 U	**0.03**	**0.028**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-10D			TLC-10S					TLC-11S							TLC-12D
		Sample Date	1/17/2002	7/18/2001	1/24/2001	1/24/2001	1/24/2001	1/17/2002	7/18/2001	7/13/2001	7/18/2003	1/15/2003	7/17/2002	4/3/2002	1/17/2002	7/12/2001	1/19/2001	1/17/2001
		Sample ID	TLC10D-011702	TLC10D-071801	TLC10D 012401	010110S 012401	TLC10S 012401	TLC10S-011702	TLC10S-071801	TLC01S-071301	TLC-11S-Q3-03	TLC11S-011503	TLC115-071702	TLC11S-040302	TLC11S-011702	TLC11S-071201	TLC11S 011901	TLC12D 011701
		Unit																
Volatile Organic Compounds																		
Acetone	4	mg/L	0.5 U	**1.2 R**	1.2 U	0.025 U	0.025 U	0.025 U	**0.025 R**	**0.031**	0.025 U	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025 UJ
Benzene	0.005	mg/L	**2.5**	**4.9**	**6.6**	**0.019**	**0.02**	**0.014**	**0.025**	**0.00011 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00023 J**	0.001 U	**0.00024 J**
Carbon Disulfide	4	mg/L	0.02 U	0.05 U	**0.025 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	--	0.001 U	0.001 U	0.001 U	**0.00049 J**
Dichloromethane	0.005	mg/L	0.1 U	0.25 U	0.25 U	0.005 U	0.005 U	**0.00046 J**	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	**0.46**	**0.87**	**1.6**	**0.0057**	**0.0057**	**0.0031**	**0.0061**	**0.00017 J**	0.001 U	0.001 U	0.001 U	**0.00022 J**	0.001 U	**0.00022 J**	**0.00042 J**	**0.036**
Toluene	1	mg/L	**0.01 J**	**0.024 J**	**0.032 J**	0.001 U	0.001 U	0.001 U	**0.0011**	**0.00058 J**	0.001 U	0.001 U	**0.00044 J**	0.001 U	**0.00071 J**	**0.0012**	**0.0046**	**0.00039 J**
Trichloroethylene	0.005	mg/L	**0.0058 J**	0.05 U	0.05 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00064 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	**0.21**	**0.4**	**0.72**	**0.0028**	**0.0029**	**0.0017 J**	**0.0049**	**0.0014 J**	0.002 U	0.002 U	0.002 U	--	0.002 U	0.002 U	0.002 U	**0.022**
Semivolatile Organic Compounds																		
2-Methylnaphthalene	*	mg/L	**0.15 J**	**0.29**	**0.46 D**	**0.0083 J**	**0.0036 J**	**0.0024 J**	**0.0022 J**	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	**0.29**
Acenaphthene	2	mg/L	**0.12 J**	**0.18**	**0.16**	**0.0058 J**	**0.0032 J**	**0.0058 J**	**0.0022 J**	0.01 U	0.01 U	**0.00031 J**	--	**0.00088 J**	--	0.01 U	**0.0018 J**	**0.14**
Acenaphthylene	0.0002	mg/L	**0.038 J**	0.05 U	0.01 U	**0.0012 J**	**0.00053 J**	**0.00091 J**	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.00035 J**	**0.003 J**
Anthracene	0.0002	mg/L	0.2 U	**0.0027 J**	**0.0029 J**	**0.0014 J**	0.01 U	**0.0012 J**	**0.00036 J**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.00097 J**	**0.009 J**
Benz(a)anthracene	0.0001	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.0013 J**	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.0014 J**	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Chrysene	0.0002	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.0015 J**	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Dibenzofuran	0.001	mg/L	0.2 U	**0.0083 J**	**0.011**	**0.0013 J**	0.01 U	**0.001 J**	0.01 U	0.01 U	0.01 U	0.01 U	--	--	--	0.01 U	0.01 U	**0.012**
Fluoranthene	1	mg/L	0.2 U	0.05 U	**0.0017 J**	**0.0037 J**	**0.0012 J**	**0.0016 J**	**0.00049 J**	0.01 U	0.01 U	**0.00064 J**	--	**0.00063 J**	--	0.01 U	**0.0038 J**	**0.0057 J**
Fluorene	1	mg/L	0.2 U	**0.027 J**	**0.034**	**0.0054 J**	**0.0018 J**	**0.0046 J**	**0.0014 J**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.00051 J**	**0.048**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.2 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	0.01 U
Naphthalene	0.02	mg/L	**1.6**	**3.3 D**	**3.6 D**	**0.025**	**0.018**	**0.012**	**0.028**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	**0.97 D**
Phenanthrene	*	mg/L	**0.027 J**	**0.029 J**	**0.037**	**0.012**	**0.0023 J**	**0.0089 J**	**0.002 J**	0.01 U	0.01 U	0.01 U	--	0.01 U	--	0.01 U	**0.003 J**	**0.046**
Pyrene	1	mg/L	0.2 U	0.05 U	**0.0018 J**	**0.0041 J**	**0.0017 J**	**0.0015 J**	0.01 U	0.01 U	0.01 U	**0.0011 J**	--	**0.00098 J**	--	0.01 U	**0.0052 J**	**0.0048 J**
Inorganic Compounds																		
Aluminum (fume or dust)	*	mg/L	0.2 U	**0.47**	**5.8**	**5.3**	**4.6**	**6.8**	**0.21**	--	**2**	**0.20 B**	--	--	--	**0.1 B**	**3.4**	**0.12 J**
Antimony	0.01	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.020 U	--	--	--	**0.013 B**	0.02 U	**0.0059 J**
Arsenic	0.05	mg/L	0.01 U	0.01 U	0.01 U	**0.0046 B**	**0.0047 B**	**0.005 B**	0.01 U	--	0.01 U	0.010 U	--	--	--	**0.0041 B**	**0.0073 B**	0.01 U
Barium	2	mg/L	**0.39**	**0.36**	**0.34**	**0.27**	**0.26**	**0.29**	**0.15**	--	**0.23**	**0.11**	--	--	--	**0.1**	**0.1**	**0.25**
Beryllium	0.004	mg/L	**0.0009 B**	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.0040 U	--	--	--	0.004 U	0.004 U	0.00082 U
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0050 U	--	--	--	0.005 U	0.005 U	0.005 U
Calcium metal	*	mg/L	**40**	**44**	**43**	**110**	**100**	**86**	**69**	--	**59**	**44**	--	--	--	**41**	**29**	**15**
Chromium	0.1	mg/L	0.01 U	0.01 U	**0.011**	**0.0054 B**	**0.0052 B**	**0.0075 B**	0.01 U	--	0.01 U	0.010 U	--	--	--	0.01 U	**0.005 B**	0.01 U
Cobalt	*	mg/L	0.01 U	0.01 U	**0.0016 B**	**0.0027 B**	**0.0023 B**	**0.0025 B**	0.01 U	--	0.01 U	**0.0021 B**	--	--	--	**0.0024 B**	**0.0014 B**	**0.0046 J**
Copper	1.3	mg/L	0.02 U	0.02 U	**0.0032 B**	**0.0074 B**	**0.0088 B**	**0.012 B**	0.0022 U	--	0.02 U	0.0028 U	--	--	--	**0.019 B**	**0.027**	0.02 U
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	**0.076**	**0.042**	**0.091**	**0.045**	--	0.015 U	0.010 UJ	--	--	--	0.01 U	0.01 U	0.01 U
Iron	*	mg/L	**25**	**27**	**30**	**55**	**56**	**50**	**27**	--	**19**	**3.1**	--	--	--	**1.5**	**6.4 N**	**44**
Lead	0.015	mg/L	0.005 U	0.005 U	**0.0019 B**	**0.013**	**0.014**	**0.021**	0.0016 U	--	**0.009**	0.0016 U	--	--	--	**0.0028 B**	**0.036**	0.0023 U
Magnesium	*	mg/L	**22**	**24**	**23**	**14**	**13**	**12**	**8.9**	--	**23**	**13**	--	--	--	**7.2**	**8.4**	**8.9**
Manganese	*	mg/L	**2.8 N**	**2.5**	**2.2**	**1.3**	**1.3**	**0.98**	**0.73**	--	**3.9**	**1.1**	--	--	--	**0.69**	**0.63**	**2.3**
Mercury	0.002	mg/L	0.0002 U	0.0002 U	0.00020 U	0.00020 U	0.00020 U	0.0002 U	0.0002 U	--	0.0002 U	0.00020 U	--	--	--	0.0002 U	0.00020 U	0.00020 U
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.040 U	--	--	--	**0.0055 B**	0.04 U	0.04 U
Potassium	*	mg/L	**11 N**	**11**	**10**	**6.0**	**5.8**	**5.9**	**5.3**	--	**3.2**	**3.1**	--	--	--	**3.9**	**3.0**	**4.1**
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.02**	0.010 U	--	--	--	0.01 U	0.01 U	0.01 U
Sodium	*	mg/L	**80**	**87**	**86**	**10**	**10**	**9.5**	**9.1**	--	**9.4**	**5.6**	--	--	--	**3.9**	**4.6**	**17**
Thallium	0.002	mg/L	0.002 U	0.002 U	0.002 U	0.002 UW	0.002 UW	0.002 UW	0.002 U	--	0.002 U	0.0020 UJ	--	--	--	0.002 U	0.002 U	0.002 U
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	**0.01**	**0.011**	**0.0089 B**	**0.015**	0.01 U	--	**0.01**	0.010 U	--	--	--	0.01 U	**0.0059 B**	**0.0028 J**
Zinc	2	mg/L	0.02 U	0.02 U	**0.017 B**	**0.029**	**0.04**	**0.023**	0.02 U	--	**0.03**	**0.0092 B**	--	--	--	**0.049**	**0.030**	0.02 U

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
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M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-12S	TLC-13D								TLC-13S		
		Sample Date	1/17/2001	7/13/2004	1/22/2004	7/20/2003	1/16/2003	7/15/2002	1/15/2002	7/17/2001	1/19/2001	1/15/2002	7/17/2001	1/19/2001
		Sample ID	TLC12S 011701	TLC-13D-Q3-04	TLC-13D-Q1-04	TLC-13D-Q3-03	TLC13D-011603	TLC13D-071502	TLC13D-011502	TLC13D-071701	TLC13D 011901	TLC13S-011502	TLC13S-071701	TLC13S 011901
		Unit												
Volatile Organic Compounds														
Acetone	4	mg/L	0.025 UJ	0.025 U	0.025 U	0.025 U	**0.014 J**	0.025 U	0.025 U	0.025 U	0.025 U	**0.3**	**0.016 J**	0.025 U
Benzene	0.005	mg/L	**0.015**	0.001 U	0.001 U	**0.047**	0.001 U	0.001 U	0.001 U	**0.0002 J**	0.001 U	0.001 U	**0.00024 J**	0.001 U
Carbon Disulfide	4	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.00046 J**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.0012 U	0.001 U	0.001 U	0.001 U	**0.00014 J**	0.001 U	0.001 U	**0.00057 J**	0.001 U	0.001 U	**0.0006 J**	0.001 U
Toluene	1	mg/L	**0.00055 J**	0.001 U	0.001 U	**0.046**	**0.00035 J**	**0.00054 J**	0.001 U	**0.00035 J**	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	0.001 U	0.001 U	**0.044**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	**0.0081**	0.002 U	0.002 U	0.002 U	**0.00046 J**	0.002 U	0.002 U	**0.00068 J**	0.002 U	0.002 U	**0.00064 J**	0.002 U
Semivolatile Organic Compounds														
2-Methylnaphthalene	*	mg/L	**0.0046 J**	**0.0004**	**0.0014**	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Acenaphthene	2	mg/L	**0.11**	**0.0012**	**0.0024**	0.01 U	--	**0.0003 J**	--	**0.001 J**	**0.0012 J**	--	--	--
Acenaphthylene	0.0002	mg/L	**0.0017 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Anthracene	0.0002	mg/L	**0.0076 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benz(a)anthracene	0.0001	mg/L	**0.0048 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(a)pyrene	0.0002	mg/L	**0.0049 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(b)fluoranthene	0.0002	mg/L	**0.0031 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(g,h,i)perylene	0.0002	mg/L	**0.0032 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Benzo(k)fluoranthene	0.0002	mg/L	**0.0036 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Chrysene	0.0002	mg/L	**0.0046 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Dibenzofuran	0.001	mg/L	**0.027**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Fluoranthene	1	mg/L	**0.03**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	**0.0004 J**	--	--	--
Fluorene	1	mg/L	**0.037**	0.0002 U	**0.00034**	0.01 U	--	0.01 U	--	**0.00073 J**	0.01 U	--	--	--
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	**0.0021 J**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	**0.00063 J**	0.01 U	--	--	--
Naphthalene	0.02	mg/L	**0.017**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	**0.0033 J**	0.01 U	--	--	--
Phenanthrene	*	mg/L	**0.03**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	**0.00077 J**	--	--	--
Pyrene	1	mg/L	**0.023**	0.0002 U	0.0002 U	0.01 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Inorganic Compounds														
Aluminum (fume or dust)	*	mg/L	**0.086 J**	**5.5**	**4.6**	**1.8**	**0.33**	**4.5**	--	**3.1 N**	**20**	--	--	--
Antimony	0.01	mg/L	0.02 U	0.006 U	0.02 U	0.02 U	0.020 U	0.02 U	--	0.02 U	**0.013 B**	--	--	--
Arsenic	0.05	mg/L	0.01 U	**0.03**	**0.027**	0.01 U	**0.095**	**0.09**	--	**0.18**	**0.15**	--	--	--
Barium	2	mg/L	**0.32**	**0.49**	**0.48**	**0.29**	**0.29**	**0.52**	--	**0.4**	**0.58**	--	--	--
Beryllium	0.004	mg/L	0.00078 U	0.004 U	0.004 U	0.004 U	0.0040 U	0.004 U	--	0.004 U	**0.00079 B**	--	--	--
Cadmium	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0050 U	0.005 U	--	0.005 U	**0.0019 B**	--	--	--
Calcium metal	*	mg/L	**100**	**57**	**54**	**63**	**120**	**61**	--	**73**	**55**	--	--	--
Chromium	0.1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	**0.006 B**	--	**0.0032 B**	**0.021**	--	--	--
Cobalt	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	**0.0041 B**	**0.0093 B**	--	**0.0069 B**	**0.016**	--	--	--
Copper	1.3	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	**0.0013 B**	**0.0097 B**	--	**0.0039 B**	**0.025**	--	--	--
Cyanide	0.2	mg/L	0.01 U	0.01 U	0.01 U	0.015 U	--	0.01 U	--	0.01 U	0.01 U	--	--	--
Iron	*	mg/L	**35**	**63**	**65**	**36**	**27**	**65 N**	--	**52**	**71 N**	--	--	--
Lead	0.015	mg/L	0.0028 U	**0.013**	**0.013**	**0.005**	**0.0021 B**	**0.018**	--	**0.0091**	**0.062**	--	--	--
Magnesium	*	mg/L	**27**	**28**	**28**	**28**	**44**	**30**	--	**34**	**30**	--	--	--
Manganese	*	mg/L	**1.3**	**3.7**	**3.3**	**1.2**	**0.97**	**2.5**	--	**1.7**	**2.3**	--	--	--
Mercury	0.002	mg/L	0.00020 U	0.0002 U	0.0002 U	0.0002 U	0.00020 U	0.0002 U	--	0.0002 U	0.00020 U	--	--	--
Nickel	0.1	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.040 U	0.04 U	--	0.04 U	**0.012 B**	--	--	--
Potassium	*	mg/L	**14**	**14**	**13**	**24**	**21**	**15**	--	**19**	**14**	--	--	--
Selenium	0.05	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.010 U	0.01 U	--	0.01 U	0.01 U	--	--	--
Sodium	*	mg/L	**22**	**170**	**180**	**210**	**170**	**220**	--	**200**	**270**	--	--	--
Thallium	0.002	mg/L	0.002 U	0.001 U	0.001 U	0.002 U	0.0020 UWN	0.002 UWN	--	0.002 UN	0.002 U	--	--	--
Vanadium (fume or dust)	0.2	mg/L	0.01 U	0.01 U	**0.011**	0.01 U	0.010 U	**0.0075 B**	--	**0.0047 B**	**0.031**	--	--	--
Zinc	2	mg/L	0.02 U	0.02 U	0.02 U	**0.03**	0.020 U	**0.023**	--	**0.016 B**	**0.072**	--	--	--

Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

Appendix E-3
Summary of Historical Ground Water Sampling Data - Decommissioned Wells
Atlanta Gas Light Company
Former Manufactured Gas Plant Site
Augusta, Ga

Chemical Name	Type 1 Risk Reduction Standard	Location ID	TLC-14D					TLC-14S		
		Sample Date	4/3/2002	1/15/2002	7/10/2001	1/22/2001	1/22/2001	1/15/2002	7/11/2001	1/23/2001
		Sample ID	TLC14D-040302	TLC14D-011502	TLC14D-071001	010114D 012201	TLC14D	TLC14S-011502	TLC14S-071101	TLC14S 012301
		Unit								
Volatile Organic Compounds										
Acetone	4	mg/L	--	0.025 U	0.025 U	0.025 U	0.025 U	**0.018 J**	**0.022 J**	0.025 U
Benzene	0.005	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon Disulfide	4	mg/L	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichloromethane	0.005	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	0.7	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	1	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethylene	0.005	mg/L	0.001 U	**0.00027 J**	**0.00018 J**	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	2	mg/L	--	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Semivolatile Organic Compounds										
2-Methylnaphthalene	*	mg/L	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Acenaphthene	2	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0042 J**	**0.0039 J**
Acenaphthylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Anthracene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0008 J**	0.01 U
Benz(a)anthracene	0.0001	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(a)pyrene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(b)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(g,h,i)perylene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Benzo(k)fluoranthene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Chrysene	0.0002	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Dibenzo(a,h)anthracene	0.003	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Dibenzofuran	0.001	mg/L	--	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Fluoranthene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.00077 J**	**0.00076 J**
Fluorene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0012 J**	**0.00095 J**
Indeno(1,2,3-cd)pyrene	0.0004	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Naphthalene	0.02	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.017 U	0.01 U
Phenanthrene	*	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.005 J**	**0.0022 J**
Pyrene	1	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	**0.0012 J**	**0.00095 J**
Inorganic Compounds										
Aluminum (fume or dust)	*	mg/L	--	**0.21 N**	**0.52**	**5.8 N**	**3.1 N**	--	--	--
Antimony	0.01	mg/L	--	0.020 U	0.02 U	0.02 U	0.02 U	--	--	--
Arsenic	0.05	mg/L	--	0.010 U	0.01 U	0.01 U	0.01 U	--	--	--
Barium	2	mg/L	--	**0.26**	**0.26**	**0.3**	**0.29**	--	--	--
Beryllium	0.004	mg/L	--	0.0040 U	0.004 U	0.004 U	0.004 U	--	--	--
Cadmium	0.005	mg/L	--	0.0050 U	0.005 U	0.005 U	0.005 U	--	--	--
Calcium metal	*	mg/L	--	**27**	**29**	**29**	**30**	--	--	--
Chromium	0.1	mg/L	--	0.010 U	0.01 U	**0.0068 B**	**0.0037 B**	--	--	--
Cobalt	*	mg/L	--	0.010 U	**0.0024 B**	**0.0029 B**	**0.0022 B**	--	--	--
Copper	1.3	mg/L	--	0.020 U	0.02 U	**0.0078 B**	**0.0049 B**	--	--	--
Cyanide	0.2	mg/L	--	0.010 U	0.01 U	0.01 U	0.01 U	--	--	--
Iron	*	mg/L	--	**12 N**	**13**	**14**	**14**	--	--	--
Lead	0.015	mg/L	--	**0.0017 B**	0.005 U	**0.011**	**0.0041 B**	--	--	--
Magnesium	*	mg/L	--	**19**	**20**	**20**	**21**	--	--	--
Manganese	*	mg/L	--	**1.7**	**1.8**	**1.8**	**1.9**	--	--	--
Mercury	0.002	mg/L	--	0.00020 U	0.00020 U	0.00020 U	0.00020 U	--	--	--
Nickel	0.1	mg/L	--	0.040 U	0.04 U	0.04 U	0.04 U	--	--	--
Potassium	*	mg/L	--	**2.7**	**2.8**	**3.0**	**2.9**	--	--	--
Selenium	0.05	mg/L	--	0.010 U	**0.0048 B**	0.01 U	0.01 U	--	--	--
Sodium	*	mg/L	--	**19**	**19**	**19**	**20**	--	--	--
Thallium	0.002	mg/L	--	0.0020 U	0.002 U	0.002 U	0.002 UW	--	--	--
Vanadium (fume or dust)	0.2	mg/L	--	0.010 U	0.01 U	**0.0069 B**	**0.0035 B**	--	--	--
Zinc	2	mg/L	--	0.020 U	0.02 U	**0.016 B**	**0.022**	--	--	--

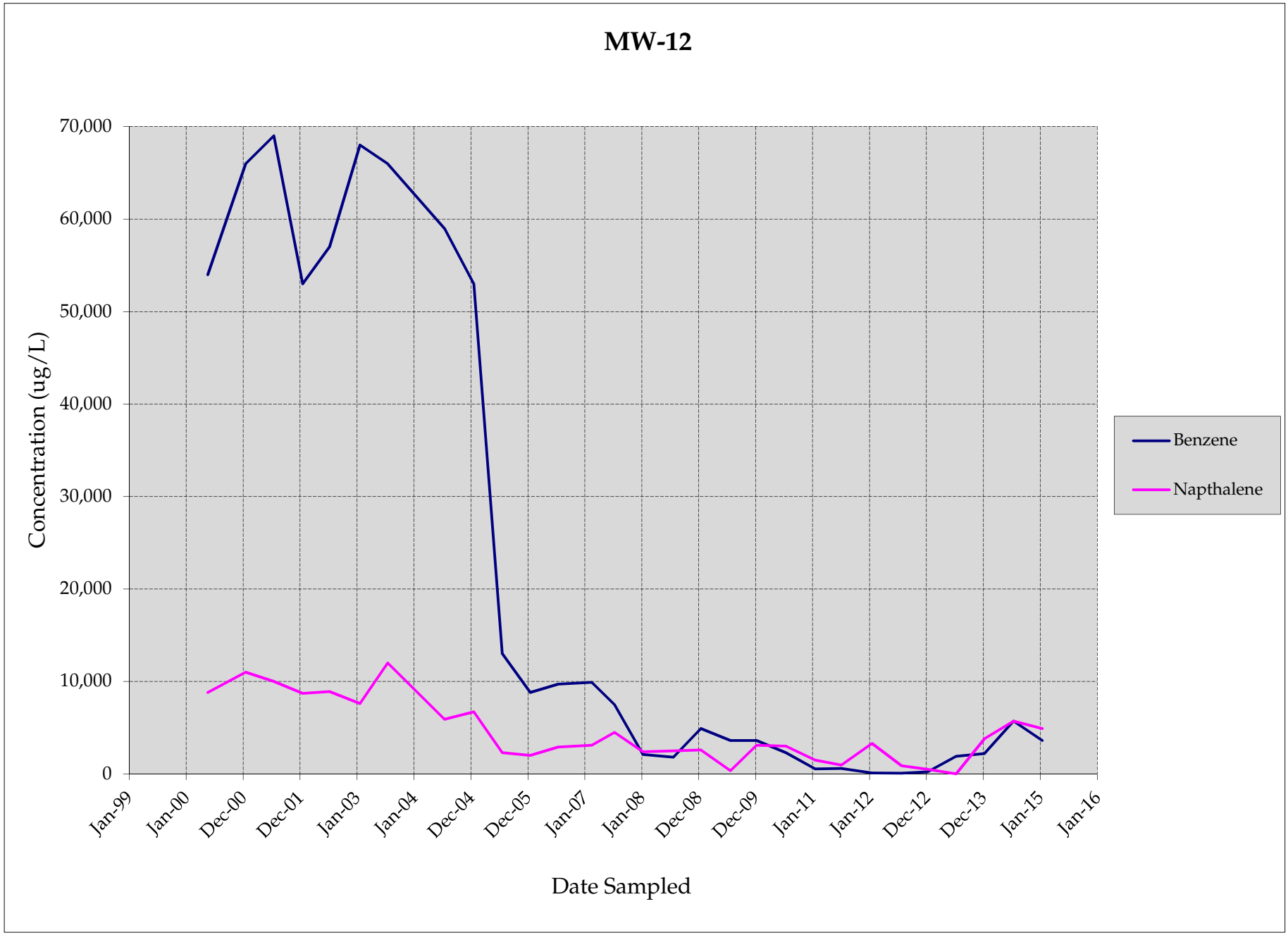
Notes:
-- - Not analyzed
* - Not a HSRA regulated compounds
B (Inorganics) - Estimated analyte concentration
Bold - analyte detected
Bold and shaded - Analyte concentration exceeds the Type 1 RRS
D - Analyte concentration reported from secondary dilution
DB - Analyte concentration reported from secondary dilution; analyte detected in method blank
J - Estimated analyte concentration
JB (Organic) - Estimated analyte concentration; analyte detected in method blank
JM (Organic) - Estimated analyte concentration; spike sample recovery outside control limits
M (Organic) - Spike sample recovery outside control limits
N - Spike sample recovery outside of control limits
RRS - Risk Reduction Standard
U - Analyte not detected at referenced detection limit
UJ - Analyte not detected; low method bias and/or matrix interference
UN - Analyte not detected; spiked sample recovery outside of control limits
UR - Analyte not detected; data rejected
UWN - Analyte not detected; post digestion spike and spike sample recovery outside control limits

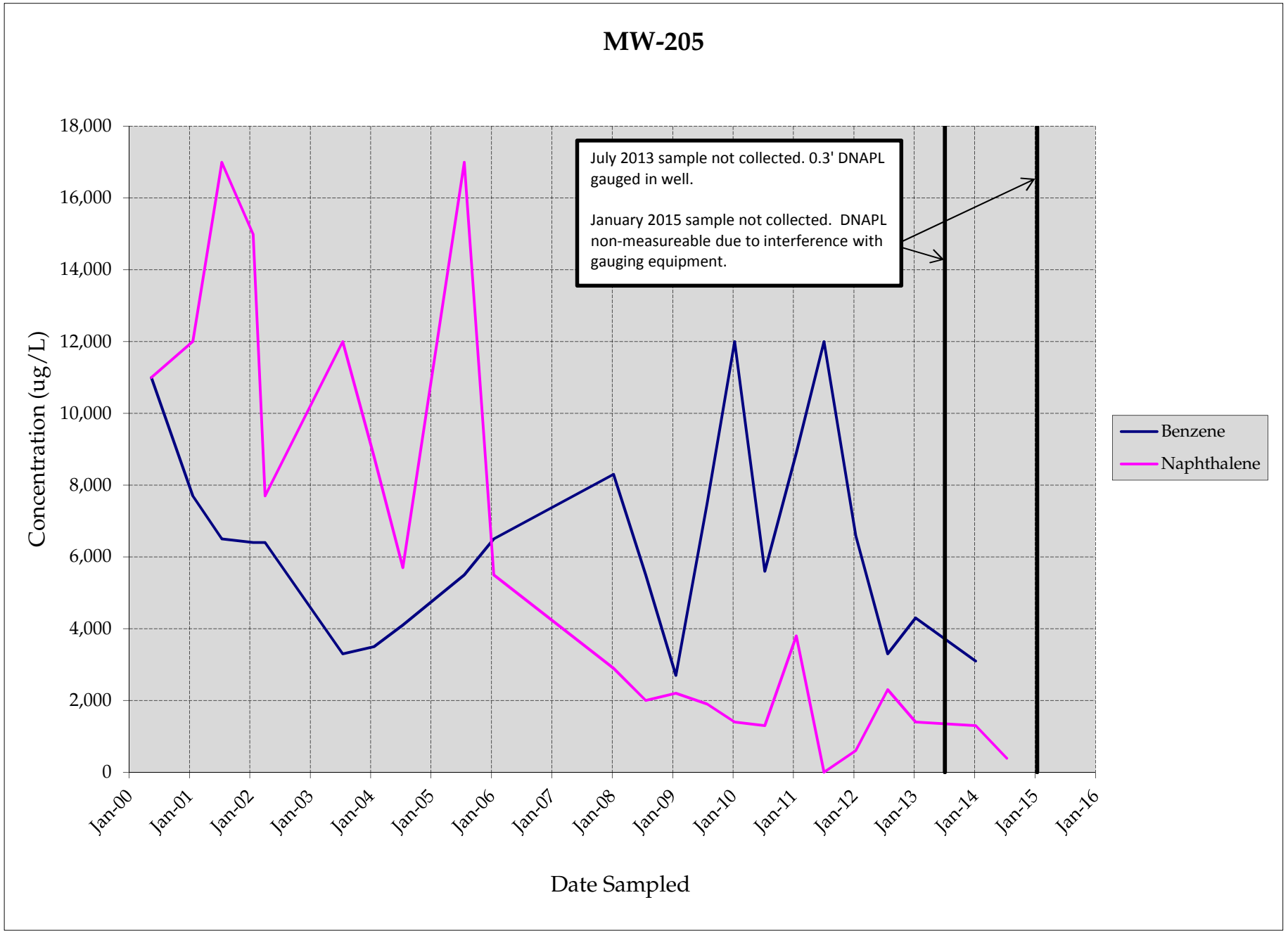
Concentration Trend Graphs

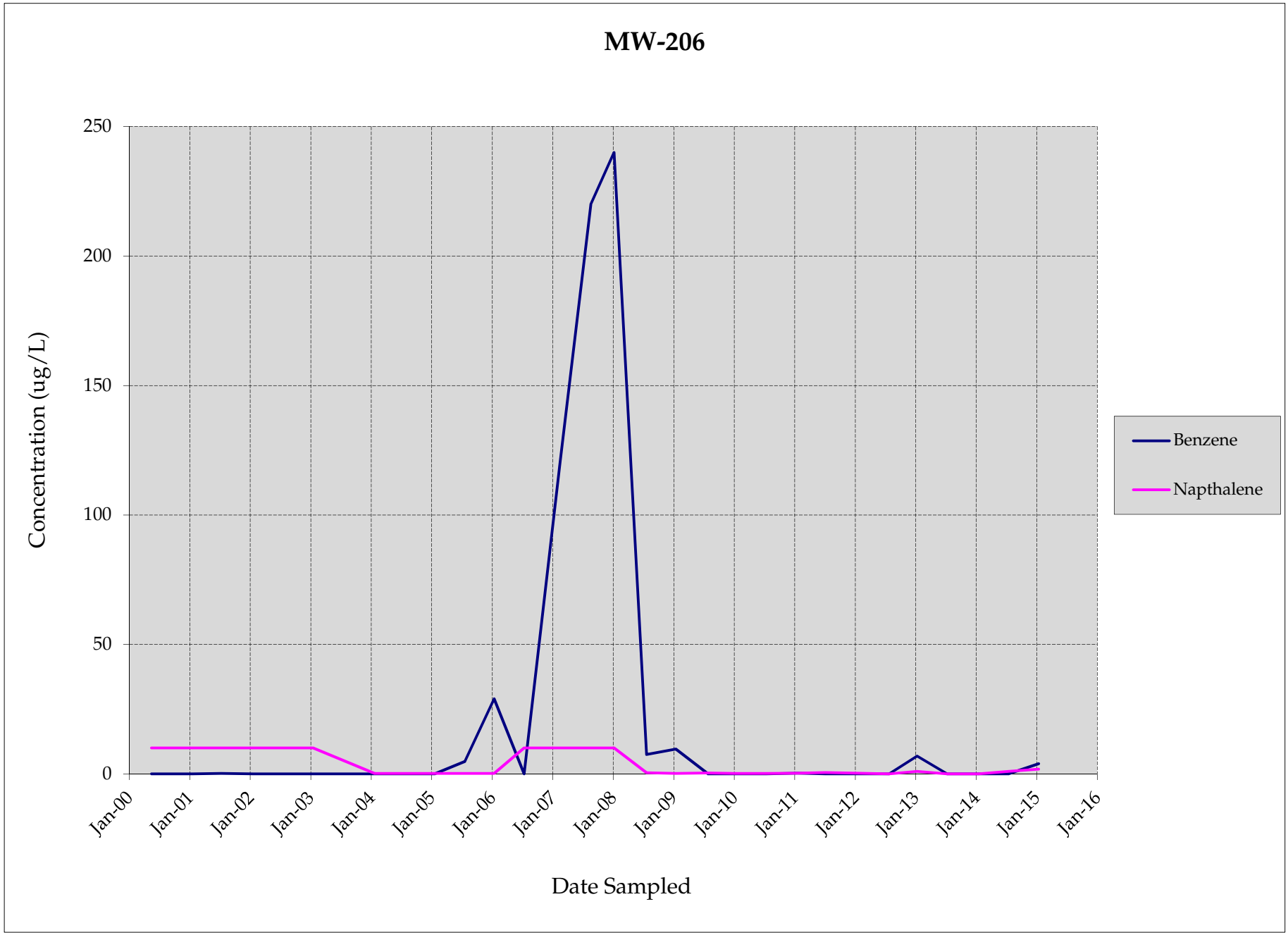
Appendix F

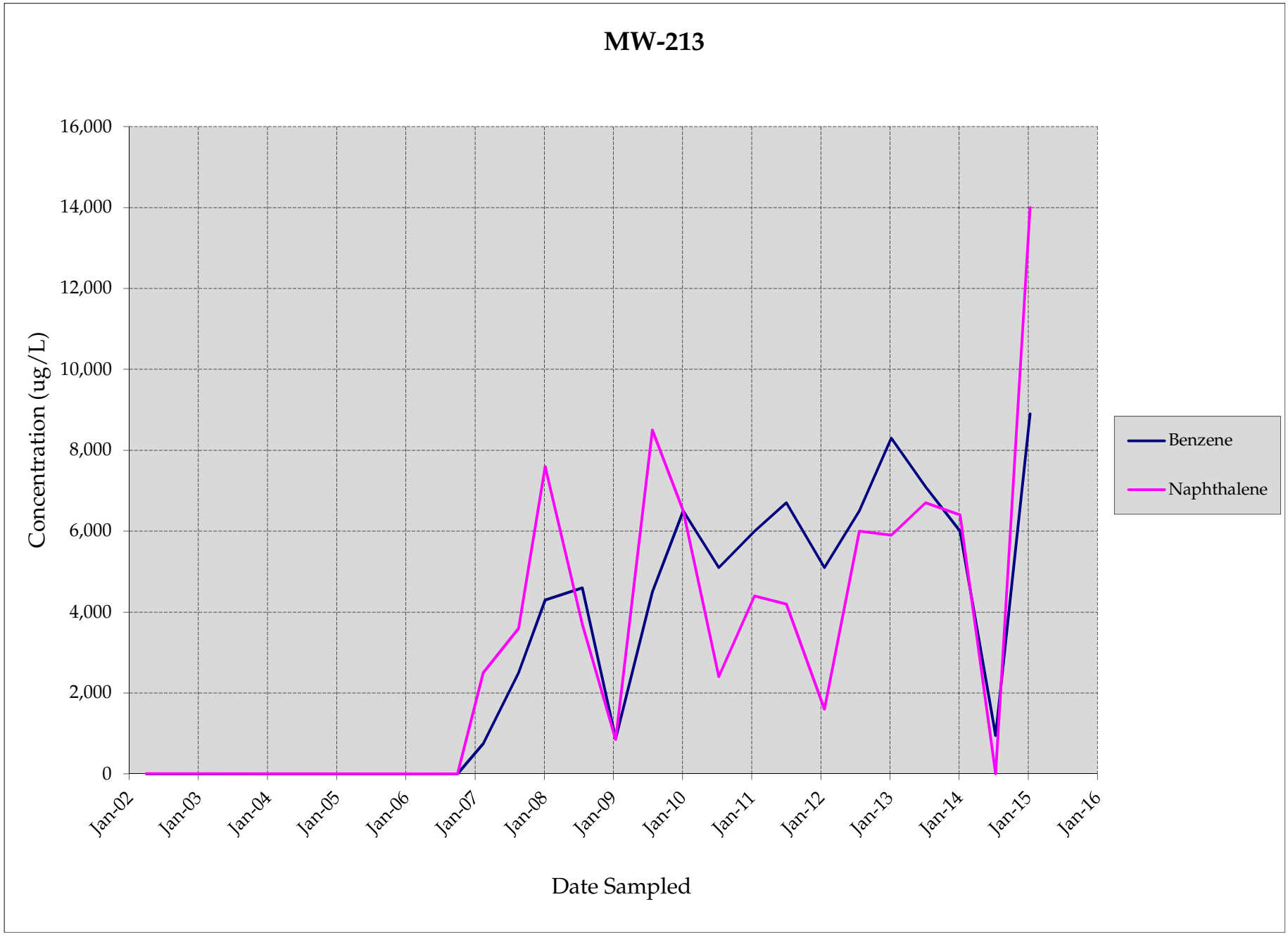
May 29, 2015
Project No. 0280918
AGL Resources

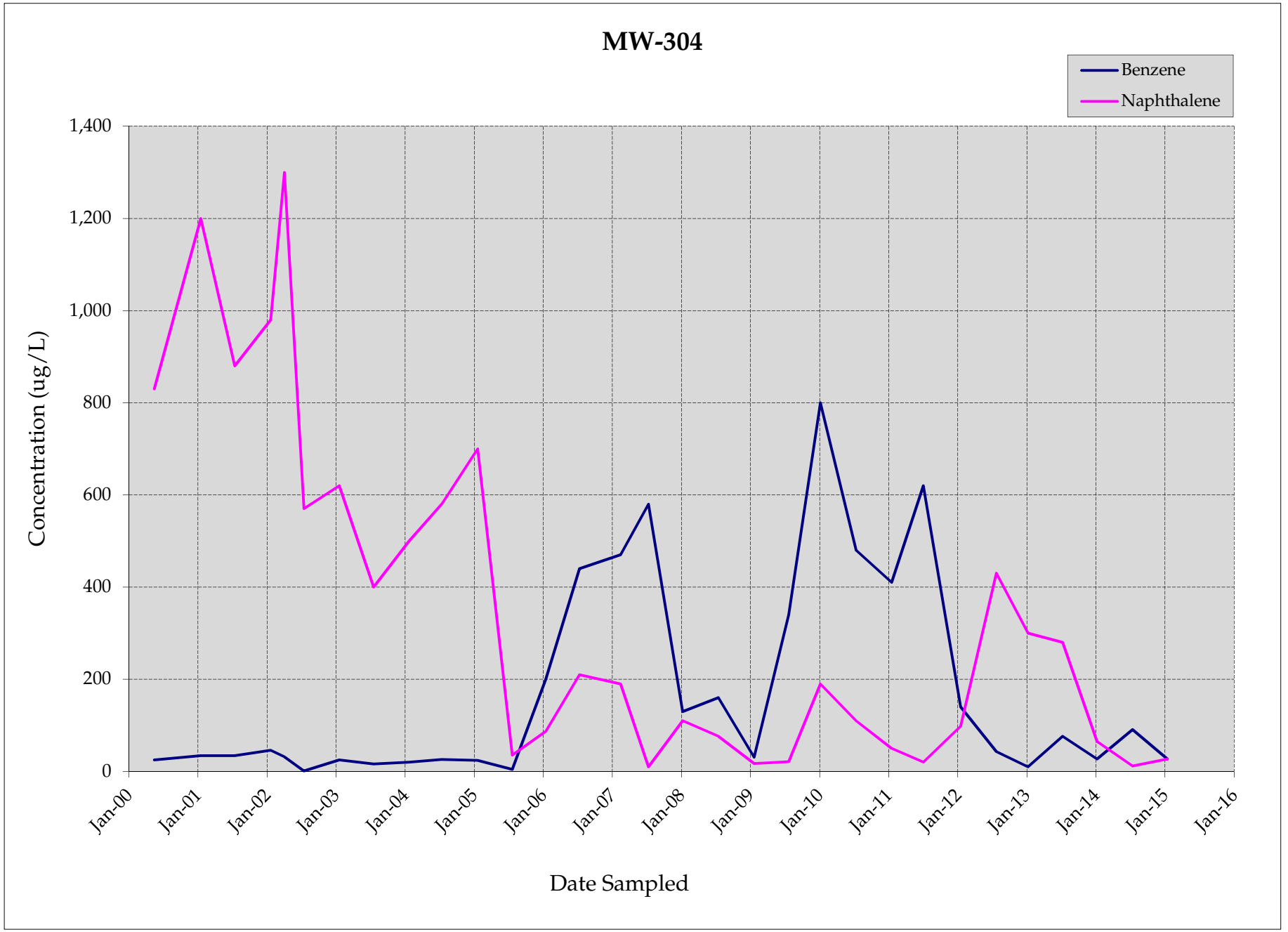
Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

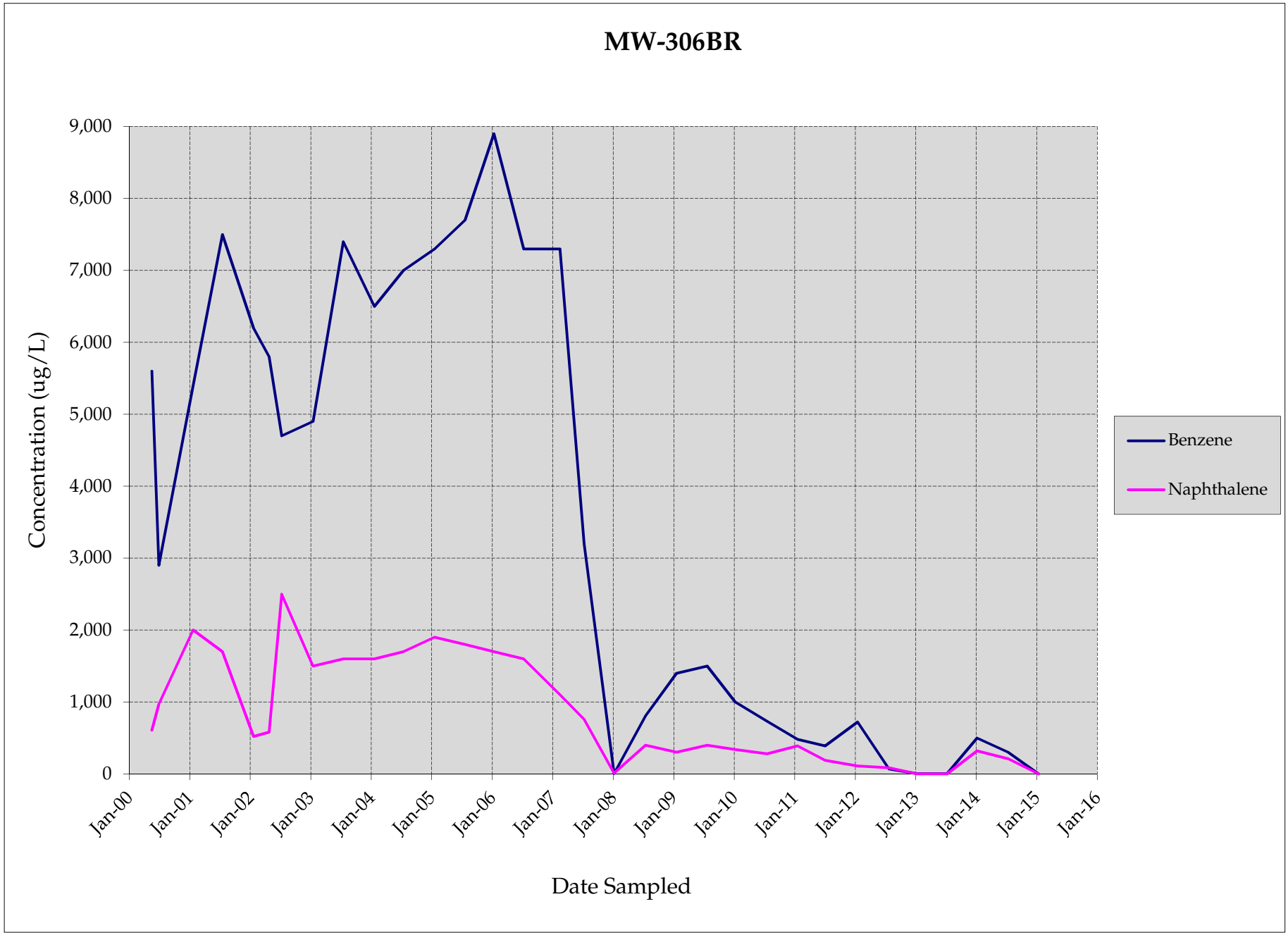

MW-12
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Concentration (ug/L)
Jan-99
Jan-00
Dec-00
Dec-01
Jan-03
Jan-04
Dec-04
Dec-05
Jan-07
Jan-08
Dec-08
Dec-09
Jan-11
Jan-12
Dec-12
Dec-13
Jan-15
Jan-16
Date Sampled
Benzene
Napthalene

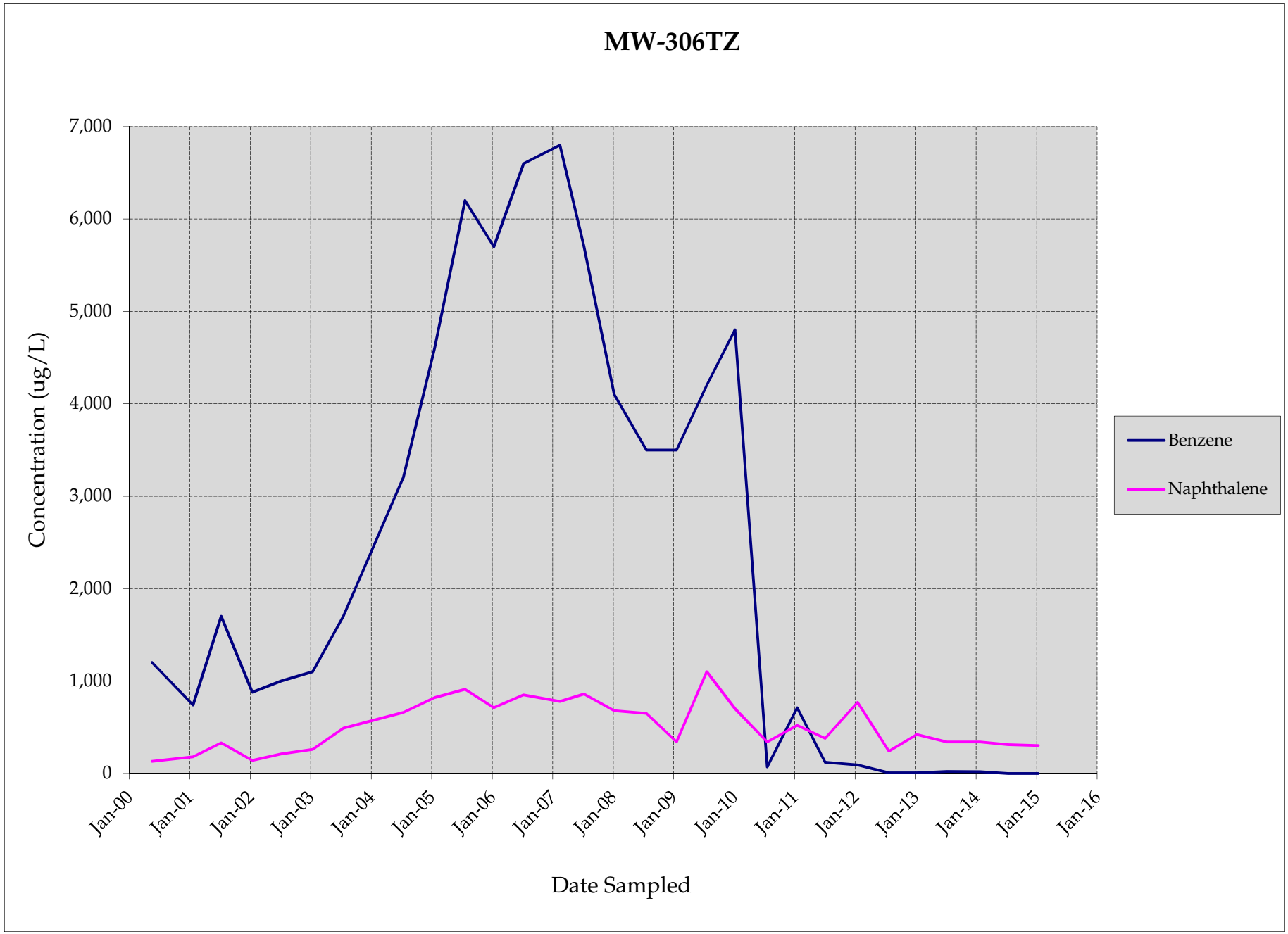

MW-205
July 2013 sample not collected. 0.3' DNAPL gauged in well.
January 2015 sample not collected. DNAPL non-measureable due to interference with gauging equipment.
Concentration (ug/L)
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

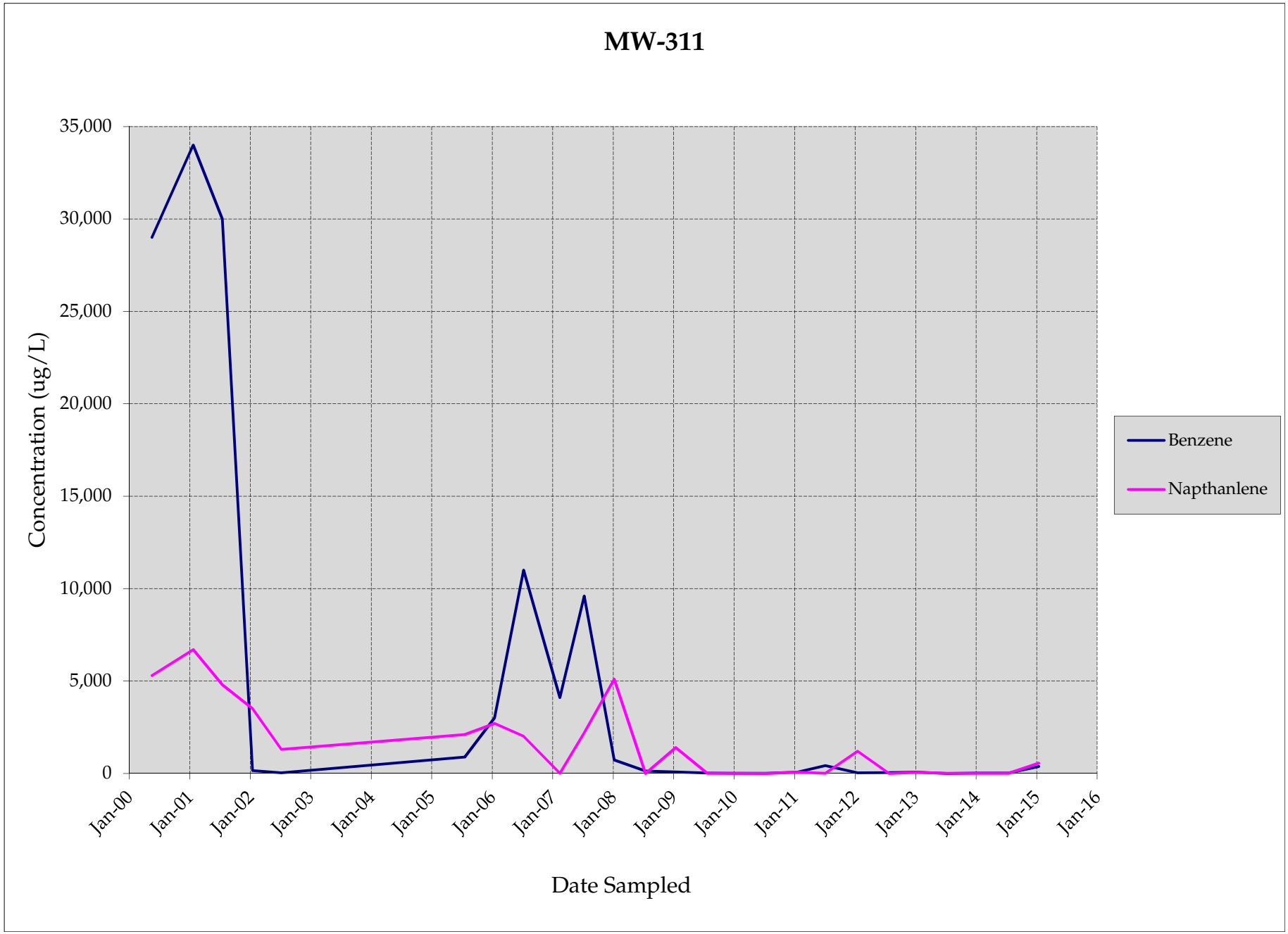

MW-206
250
200
150
100
50
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthalene

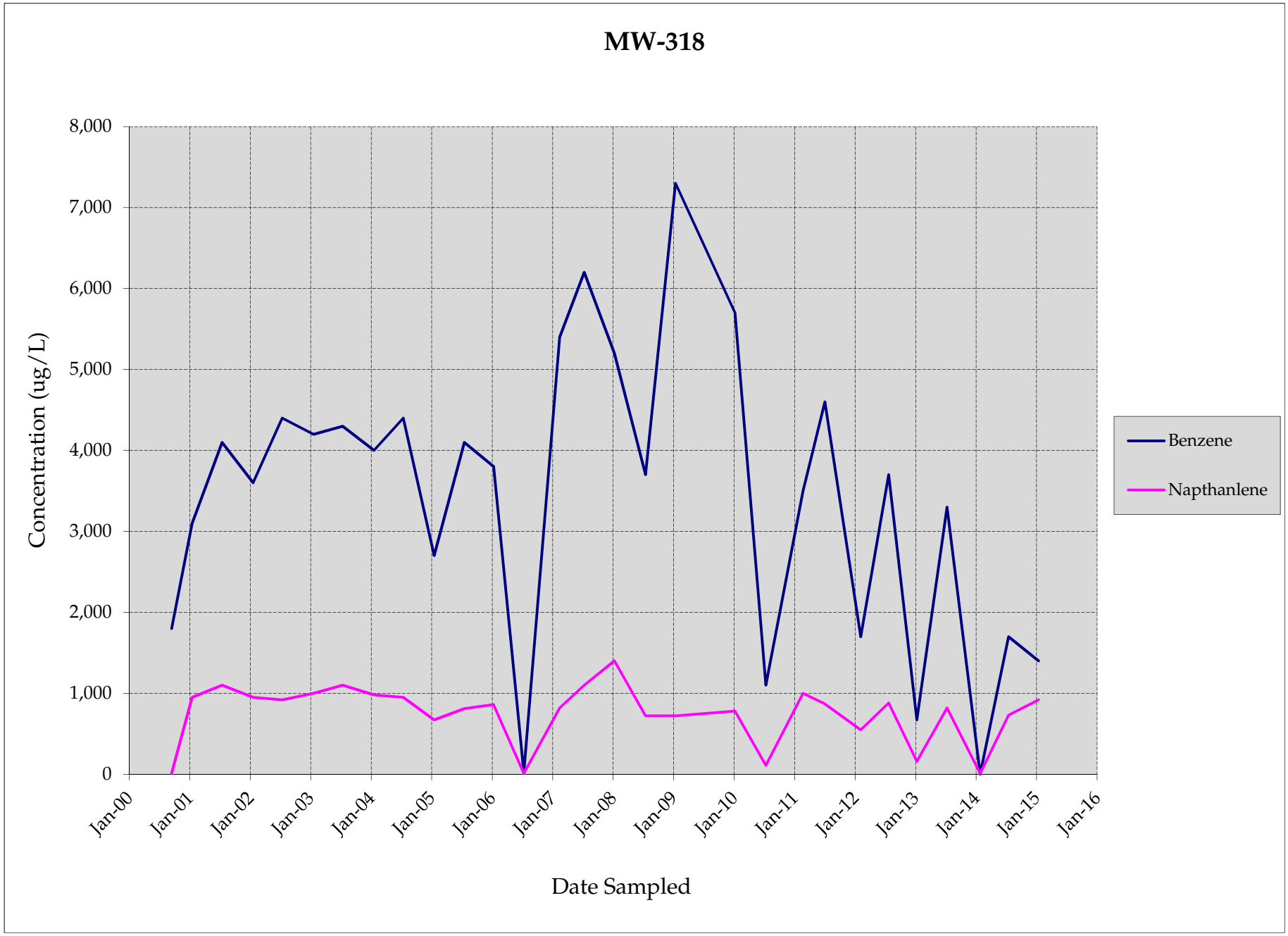

MW-213
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

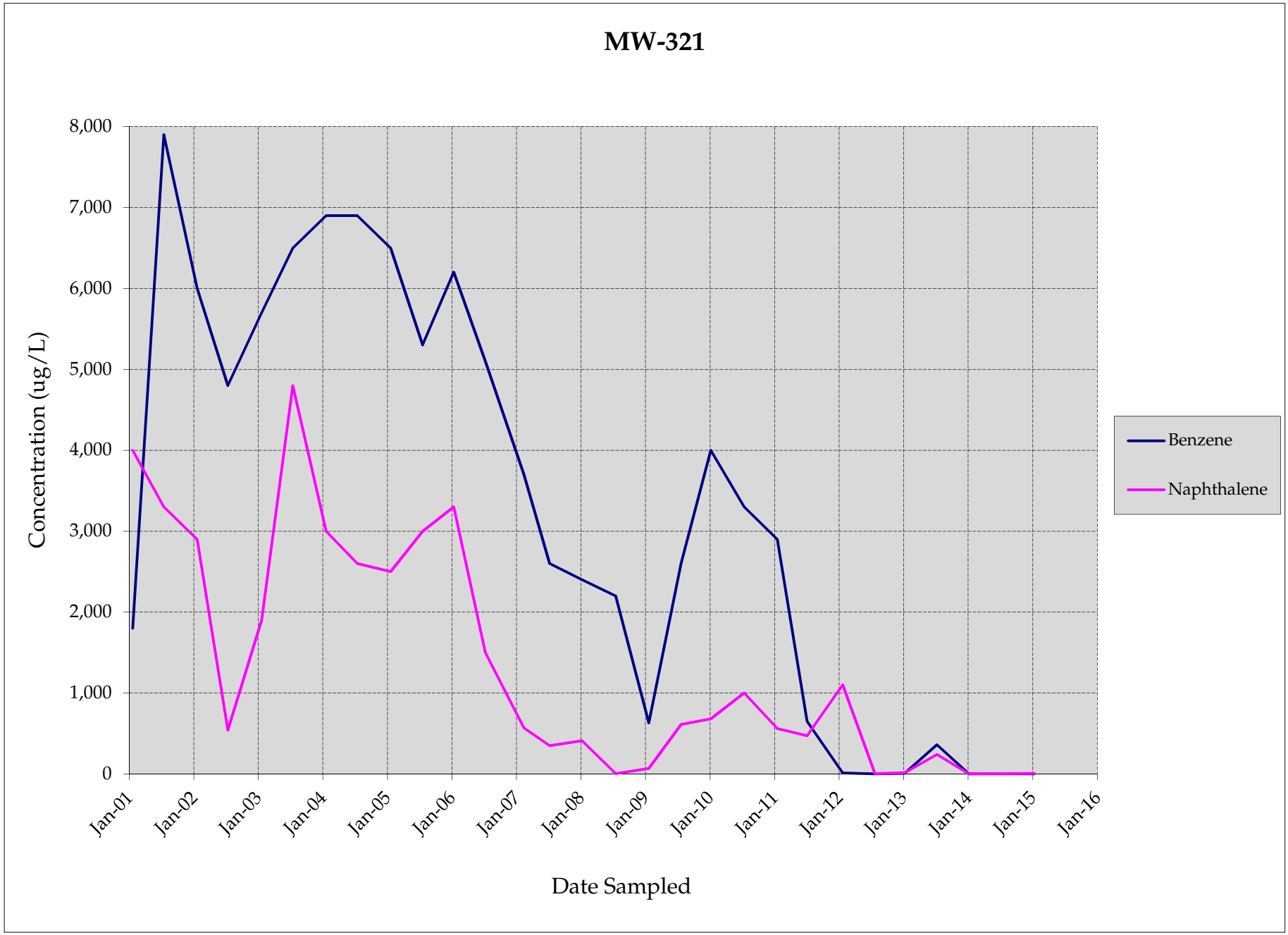

MW-304
Benzene
Naphthalene
1,400
1,200
1,000
800
600
400
200
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled

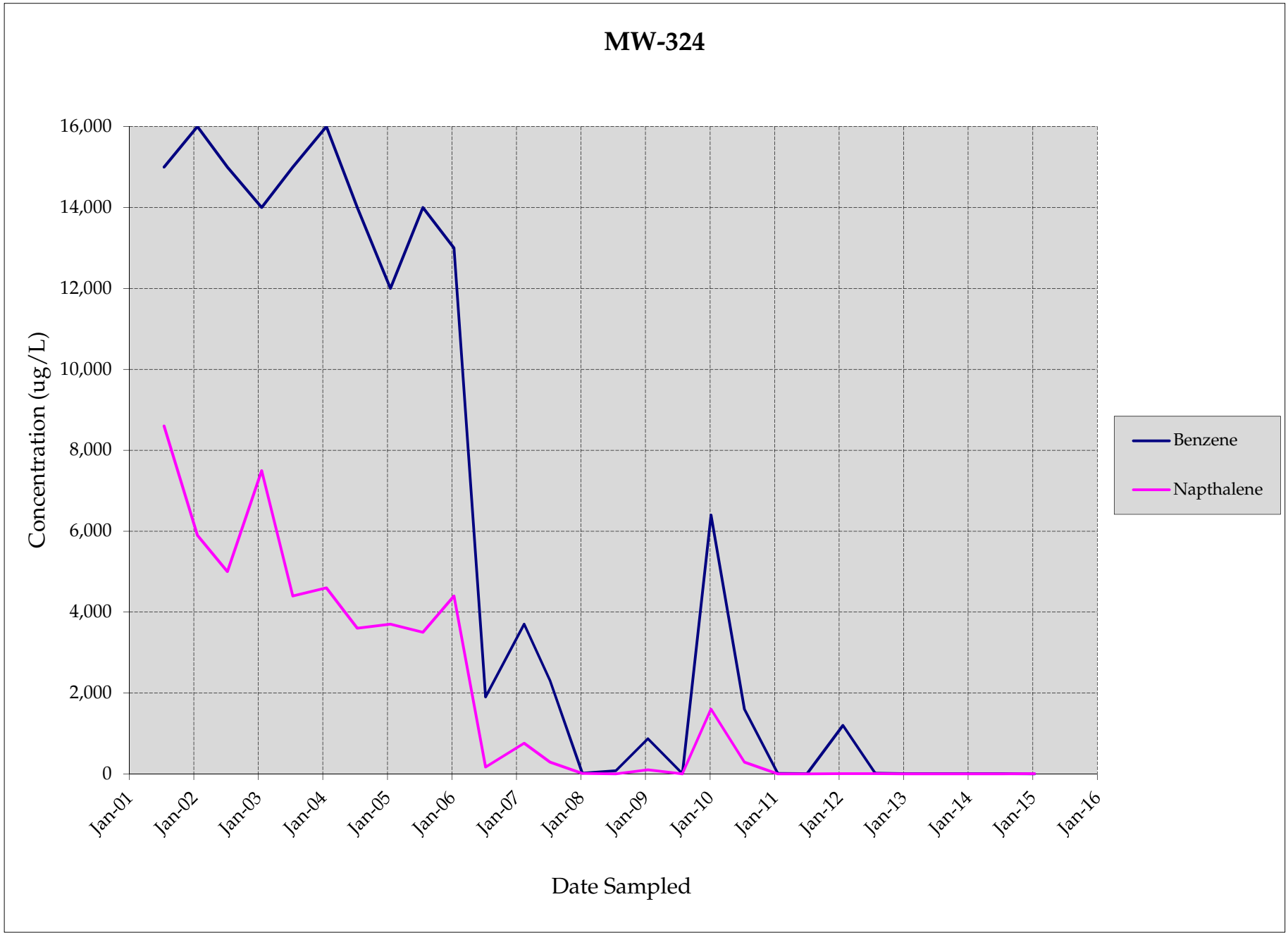

MW-306BR
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

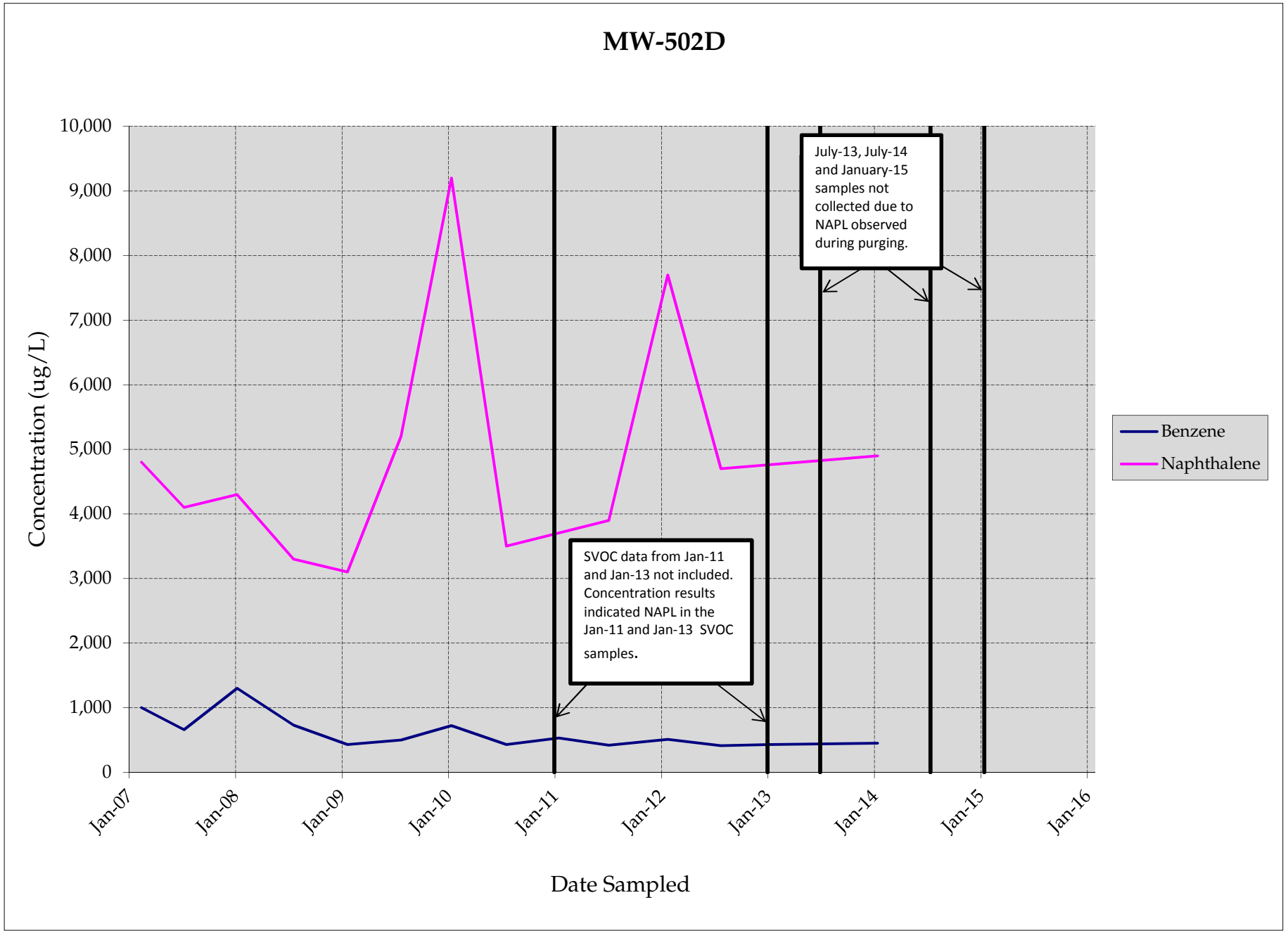

MW-306TZ
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

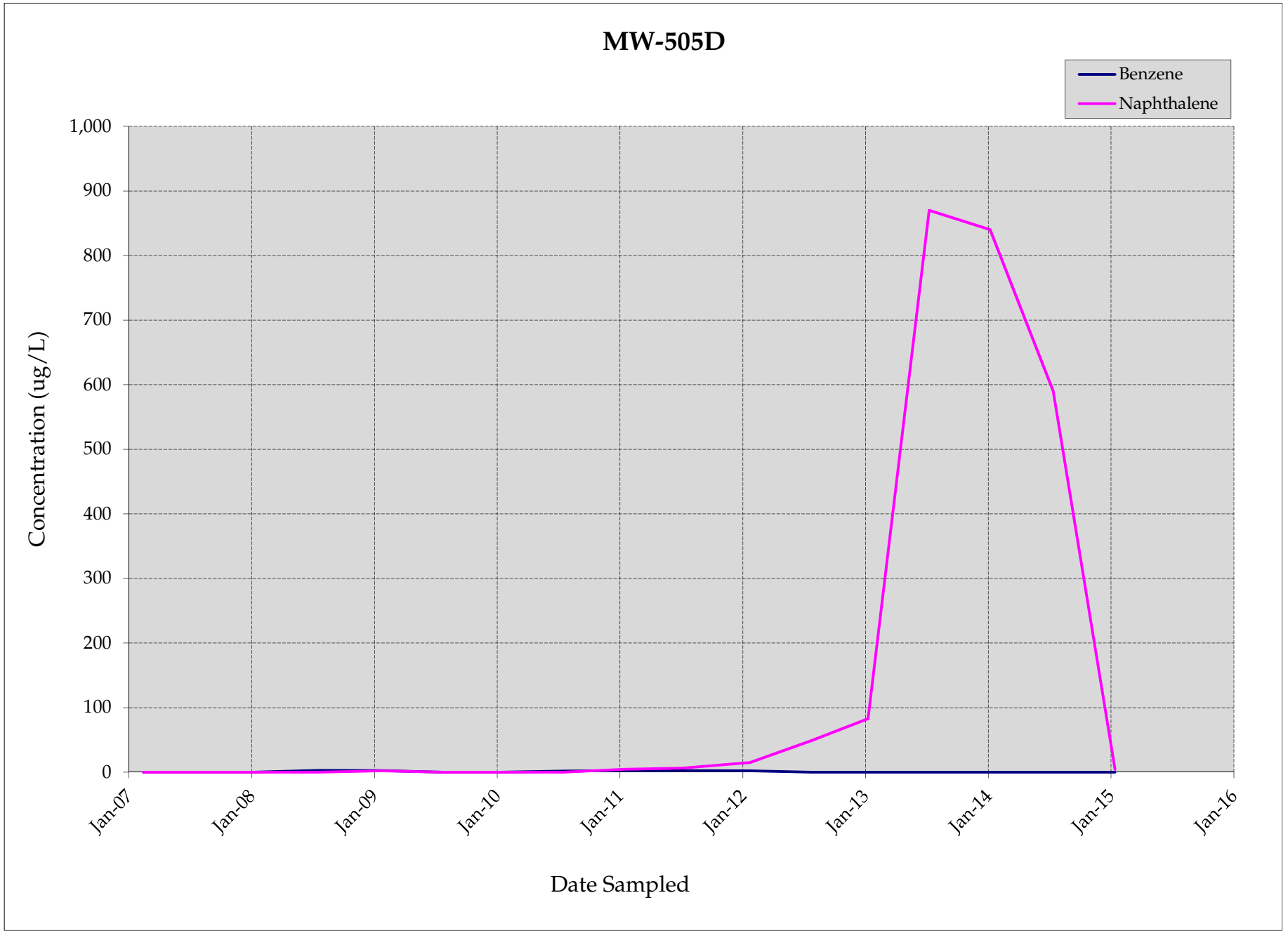

MW-311
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthanlene

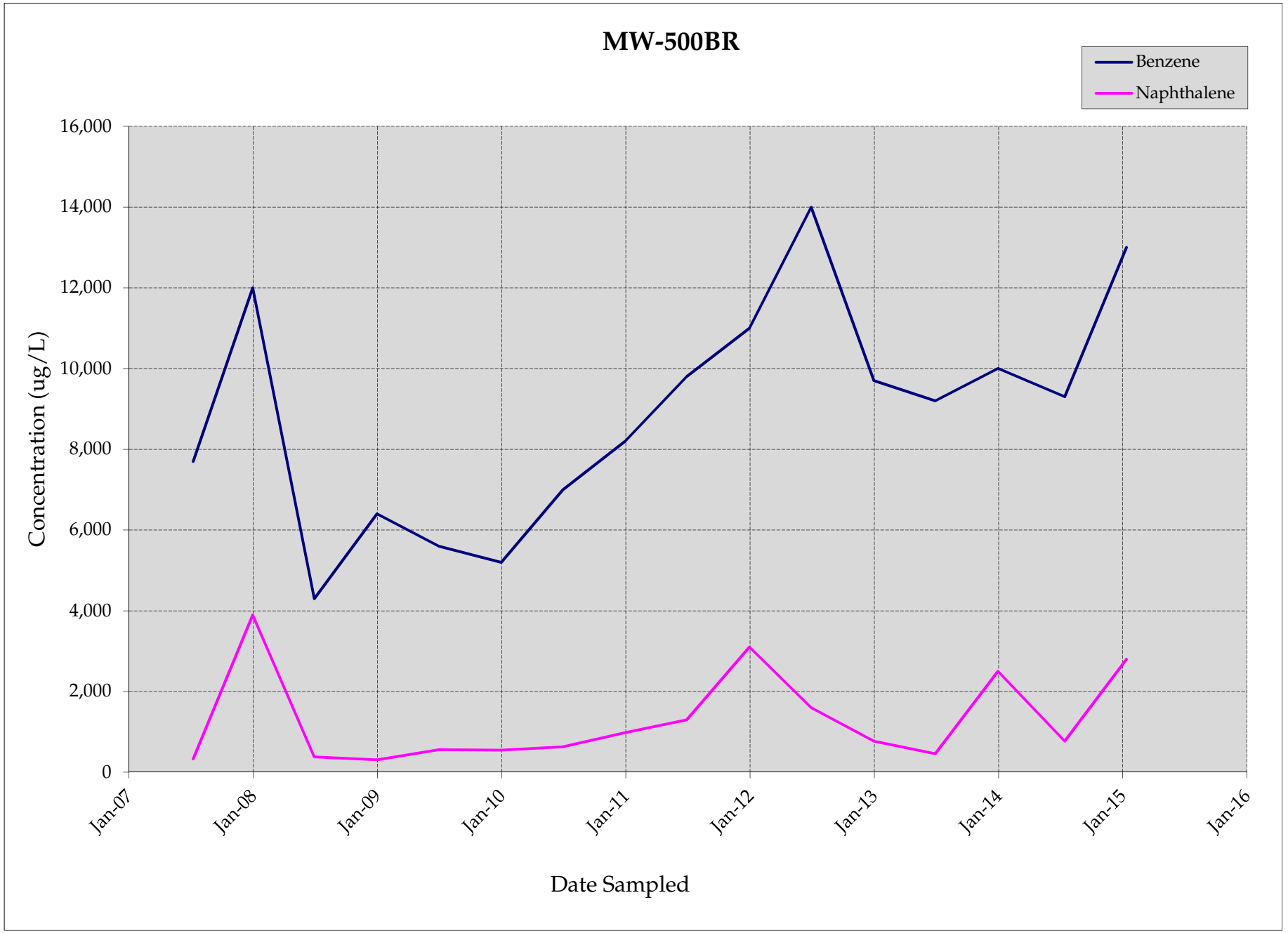

MW-318
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthanlene

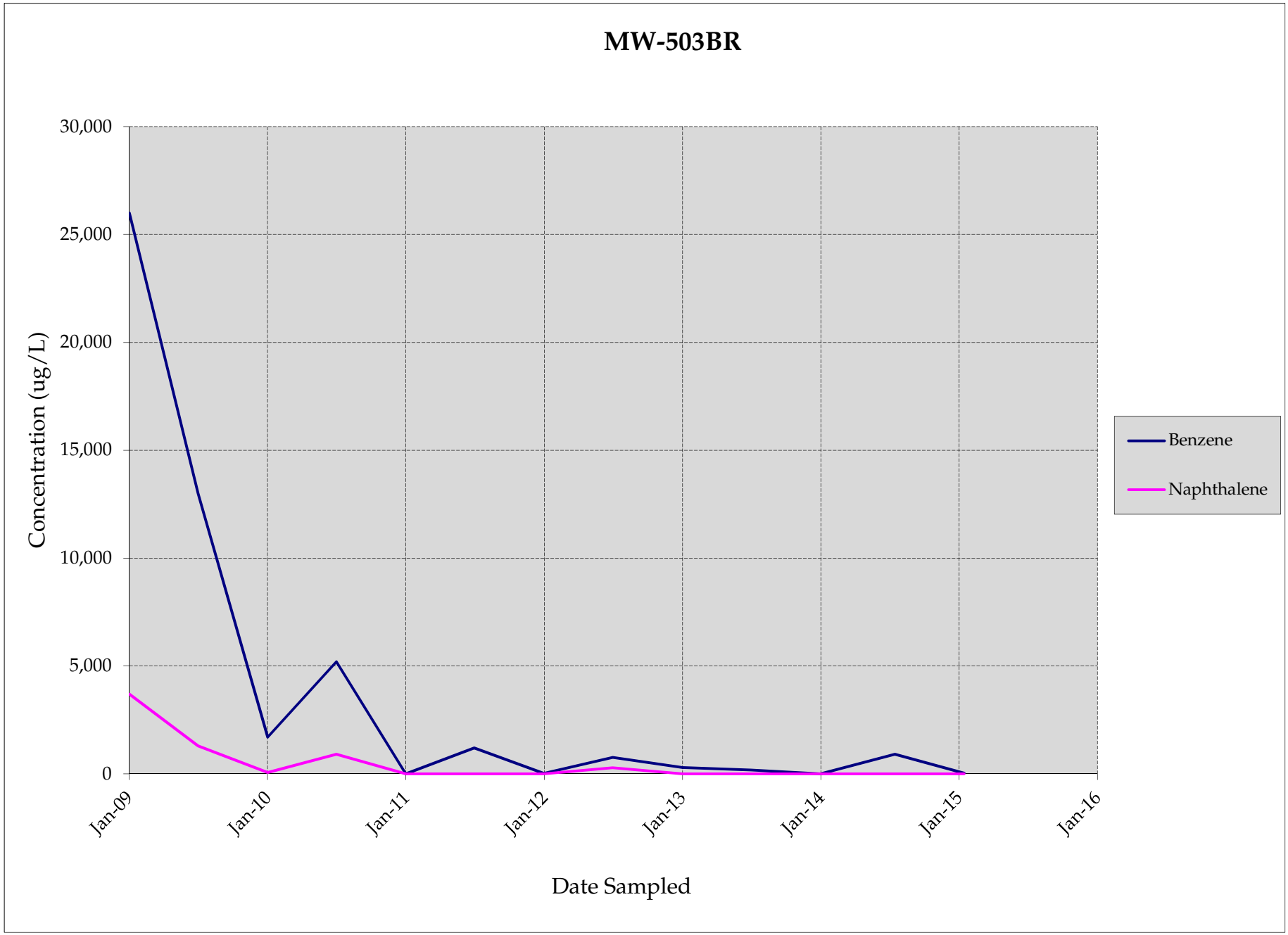

MW-321
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

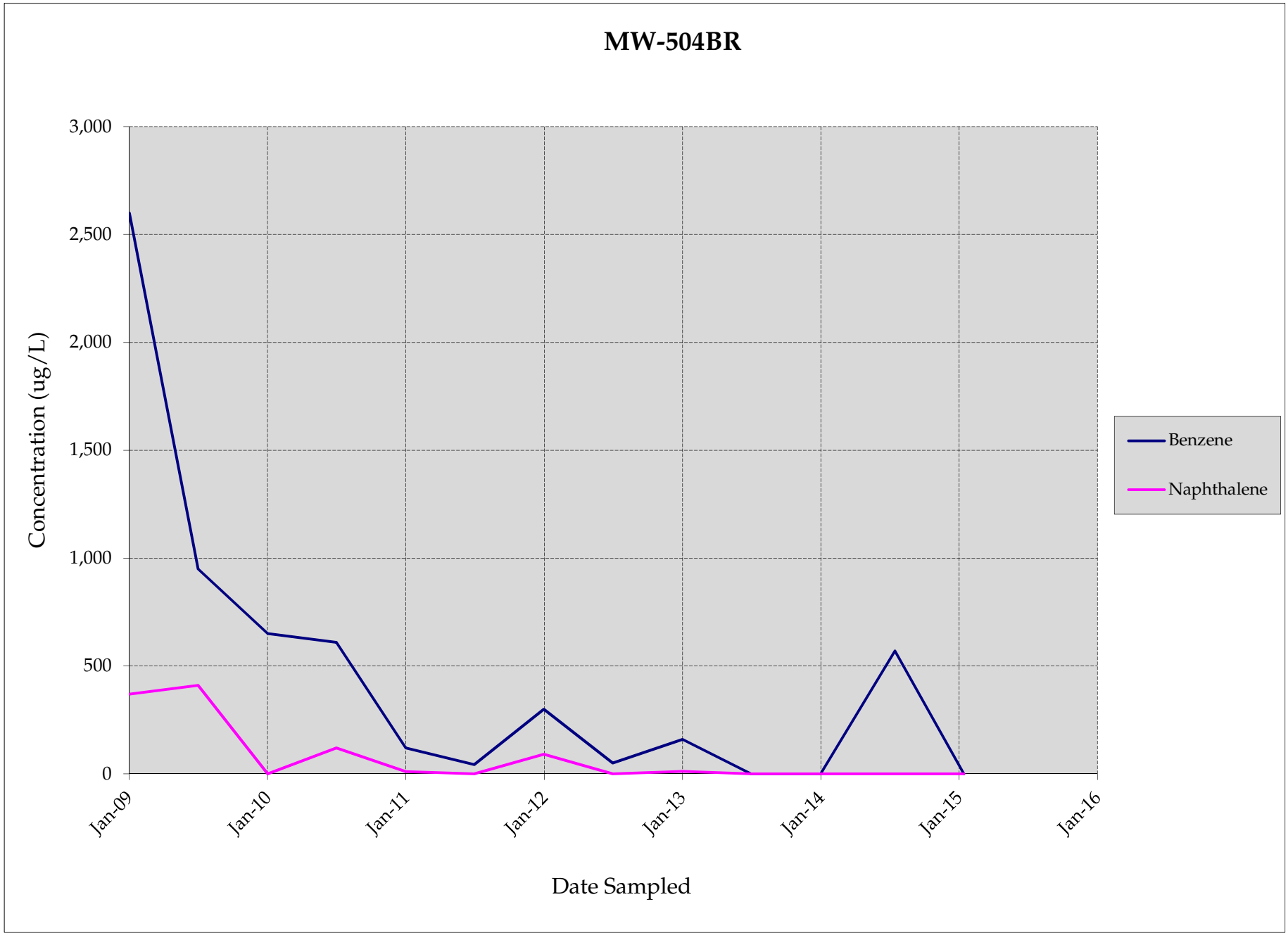

MW-324
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Napthalene

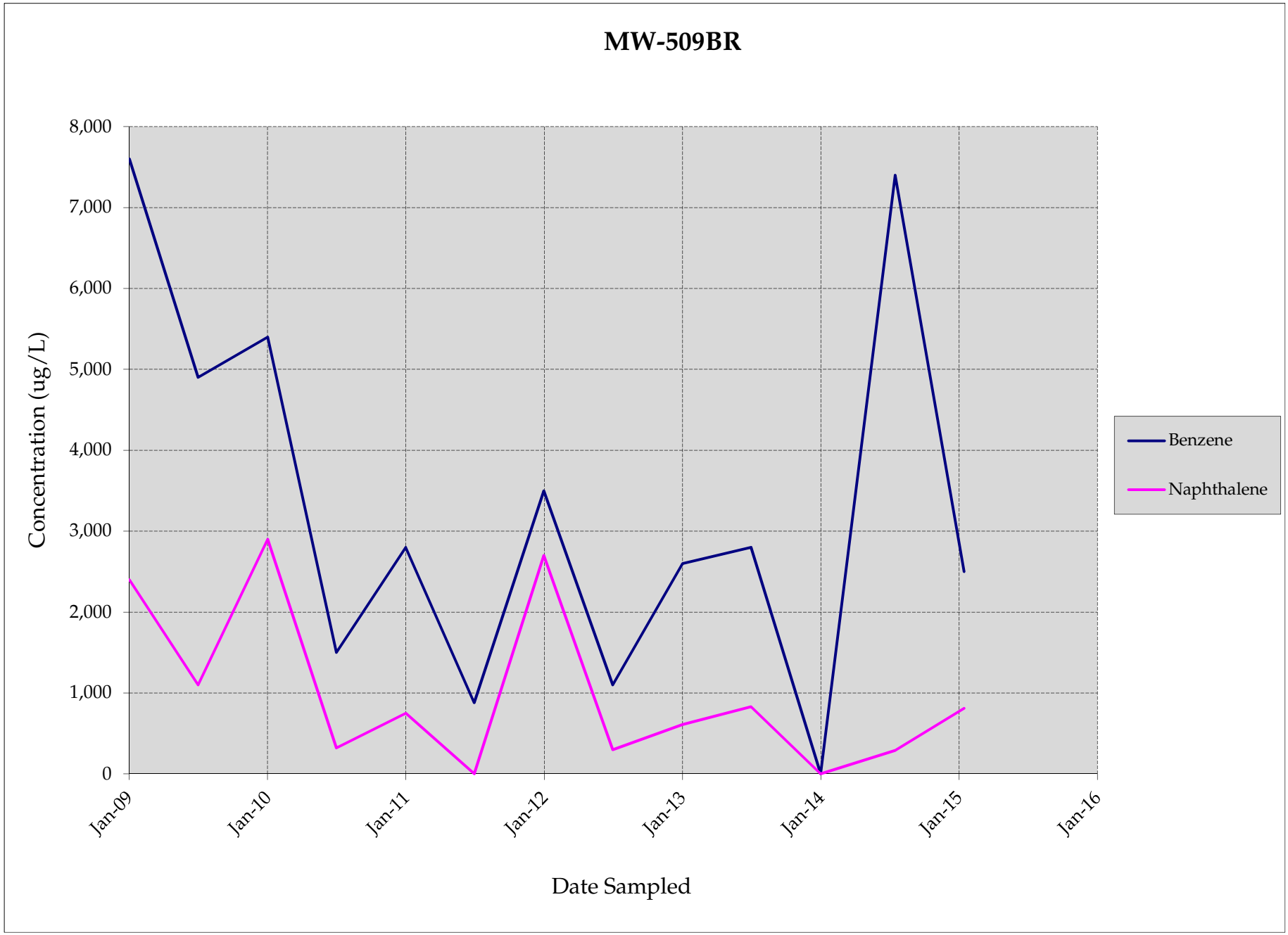

MW-502D
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
July-13, July-14 and January-15 samples not collected due to NAPL observed during purging.
SVOC data from Jan-11 and Jan-13 not included. Concentration results indicated NAPL in the Jan-11 and Jan-13 SVOC samples.
Benzene
Naphthalene

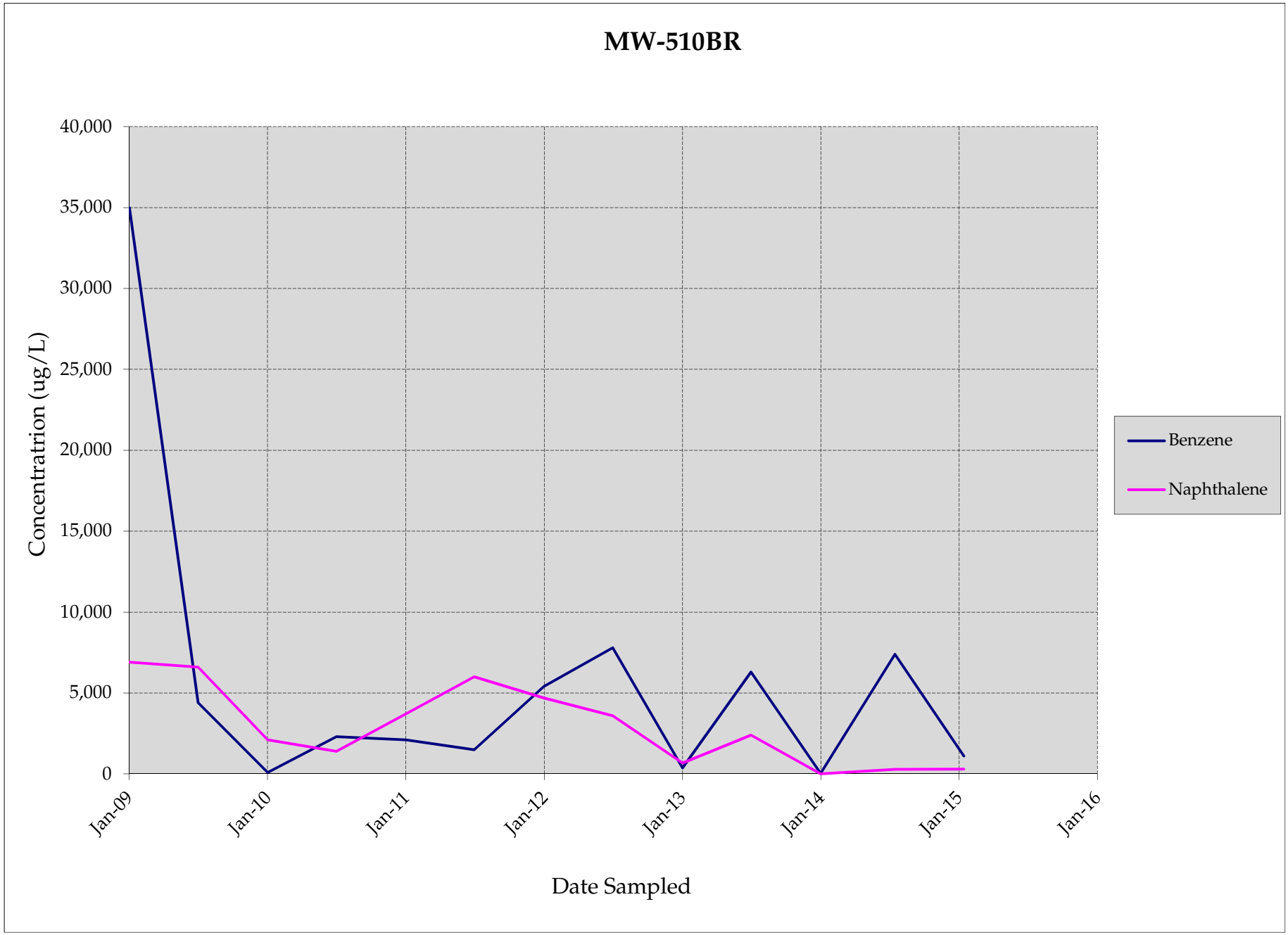

MW-505D
Benzene
Naphthalene
1,000
900
800
700
600
500
400
300
200
100
0
Concentration (ug/L)
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled

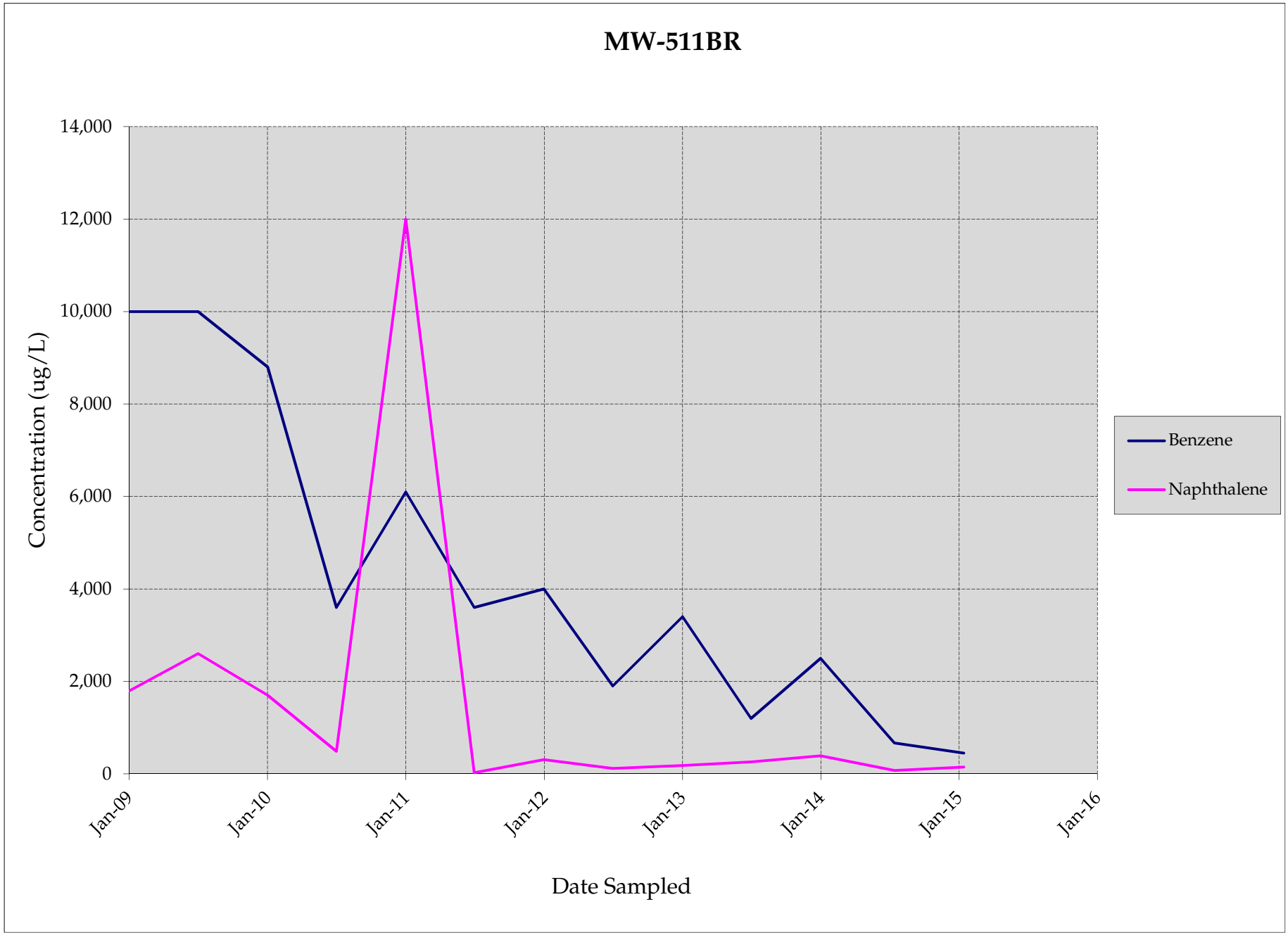

MW-500BR
Benzene
Naphthalene
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled

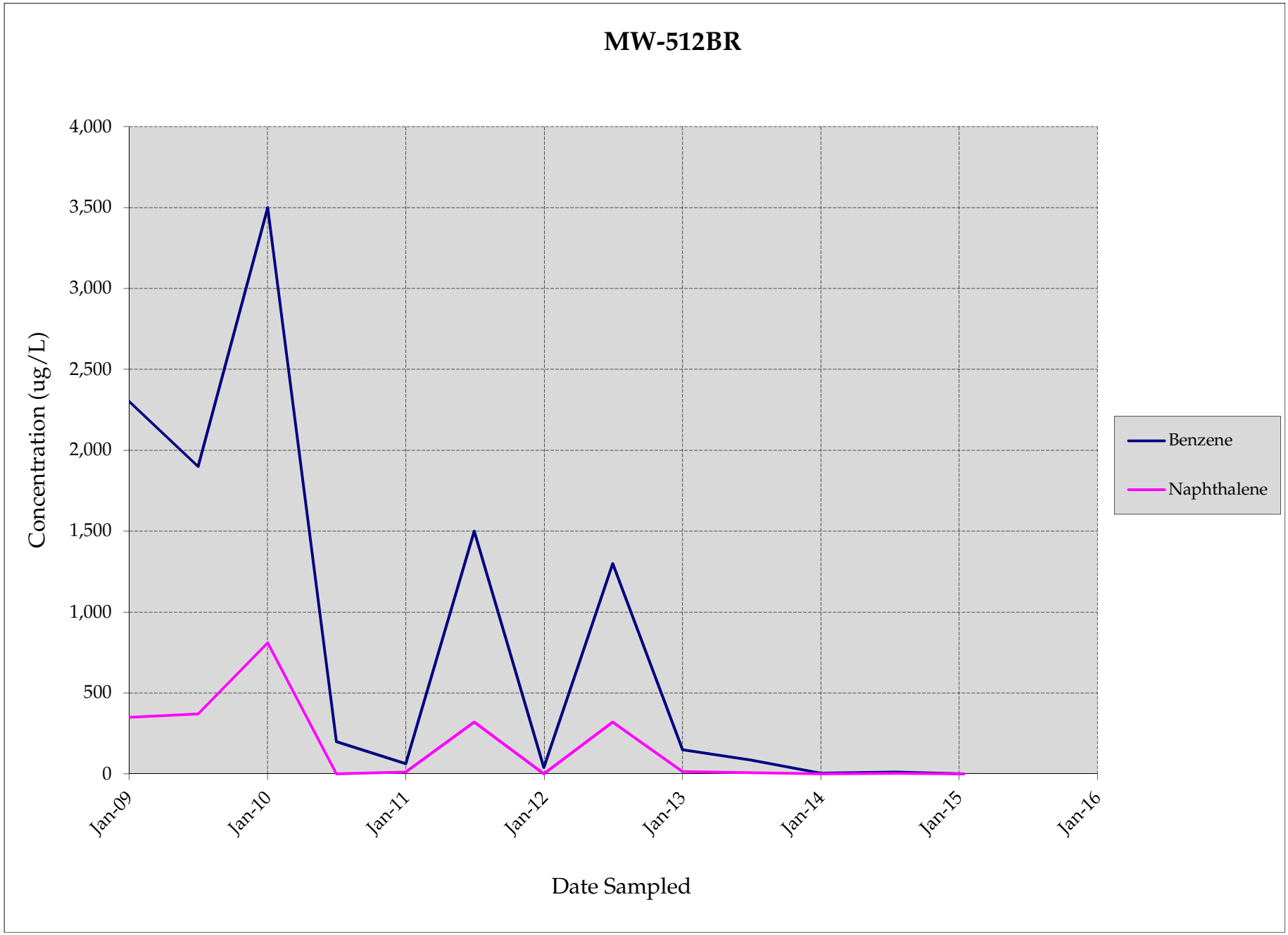

MW-503BR
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

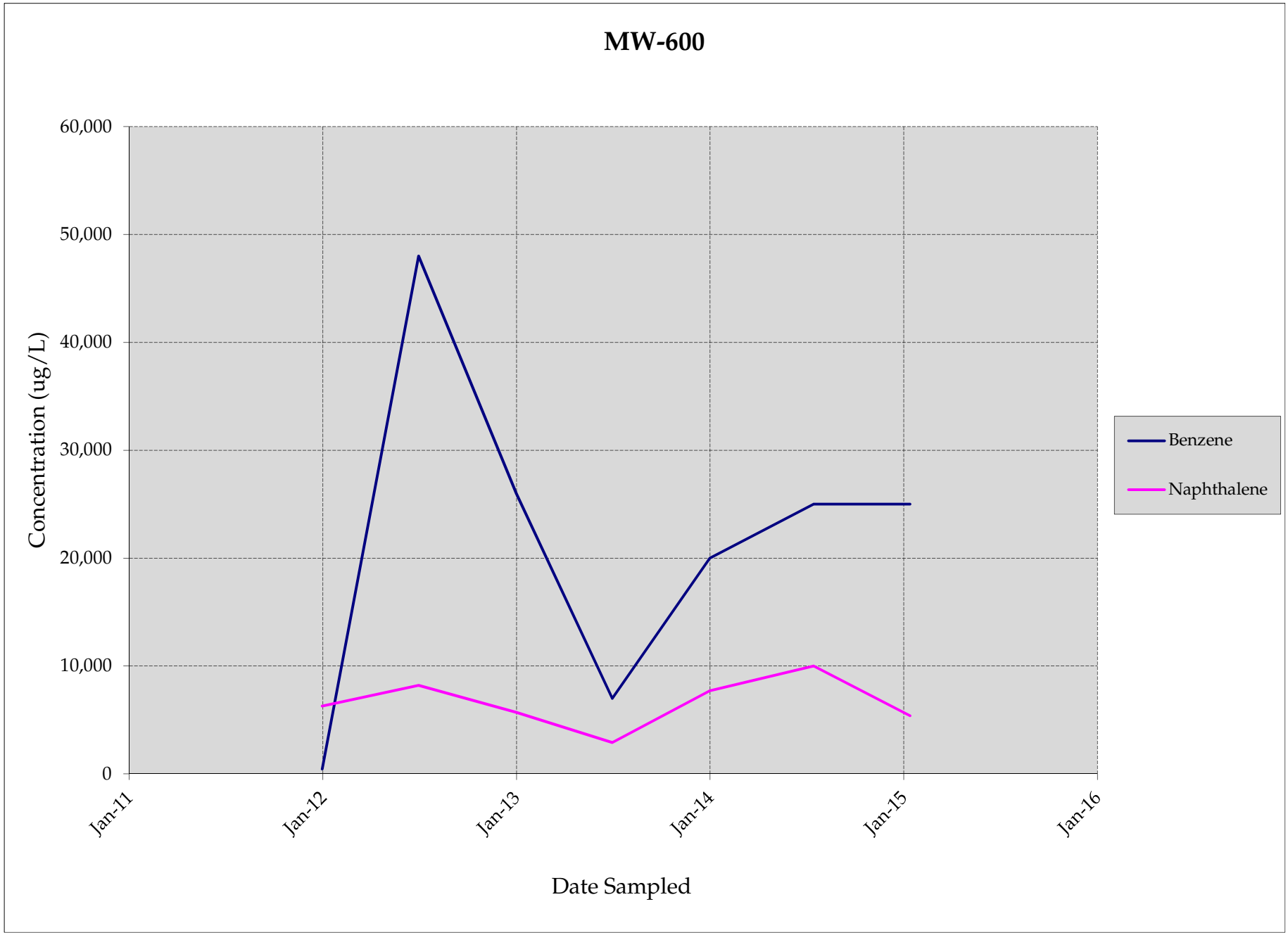

MW-504BR
3,000
2,500
2,000
1,500
1,000
500
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

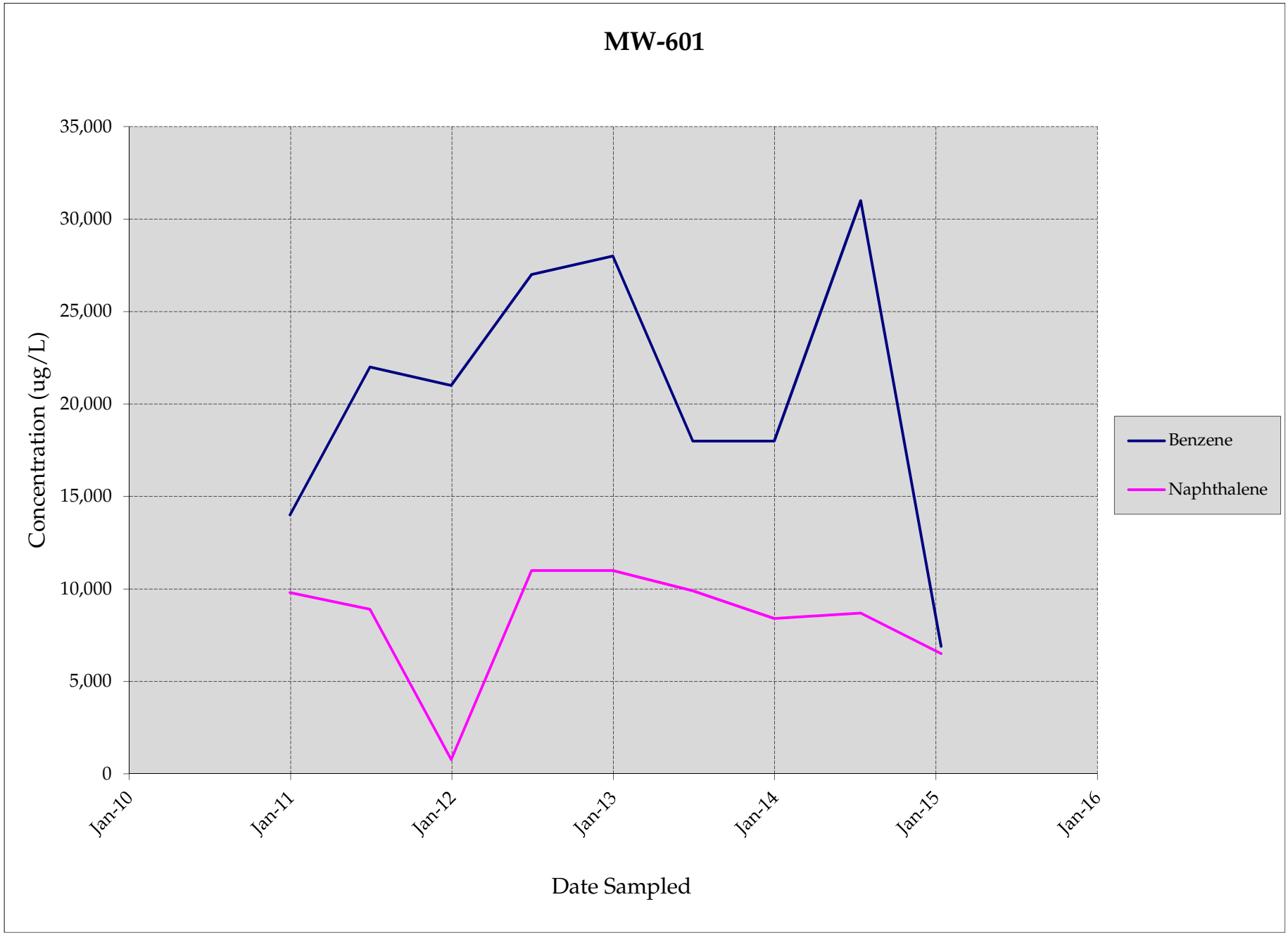

MW-509BR
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

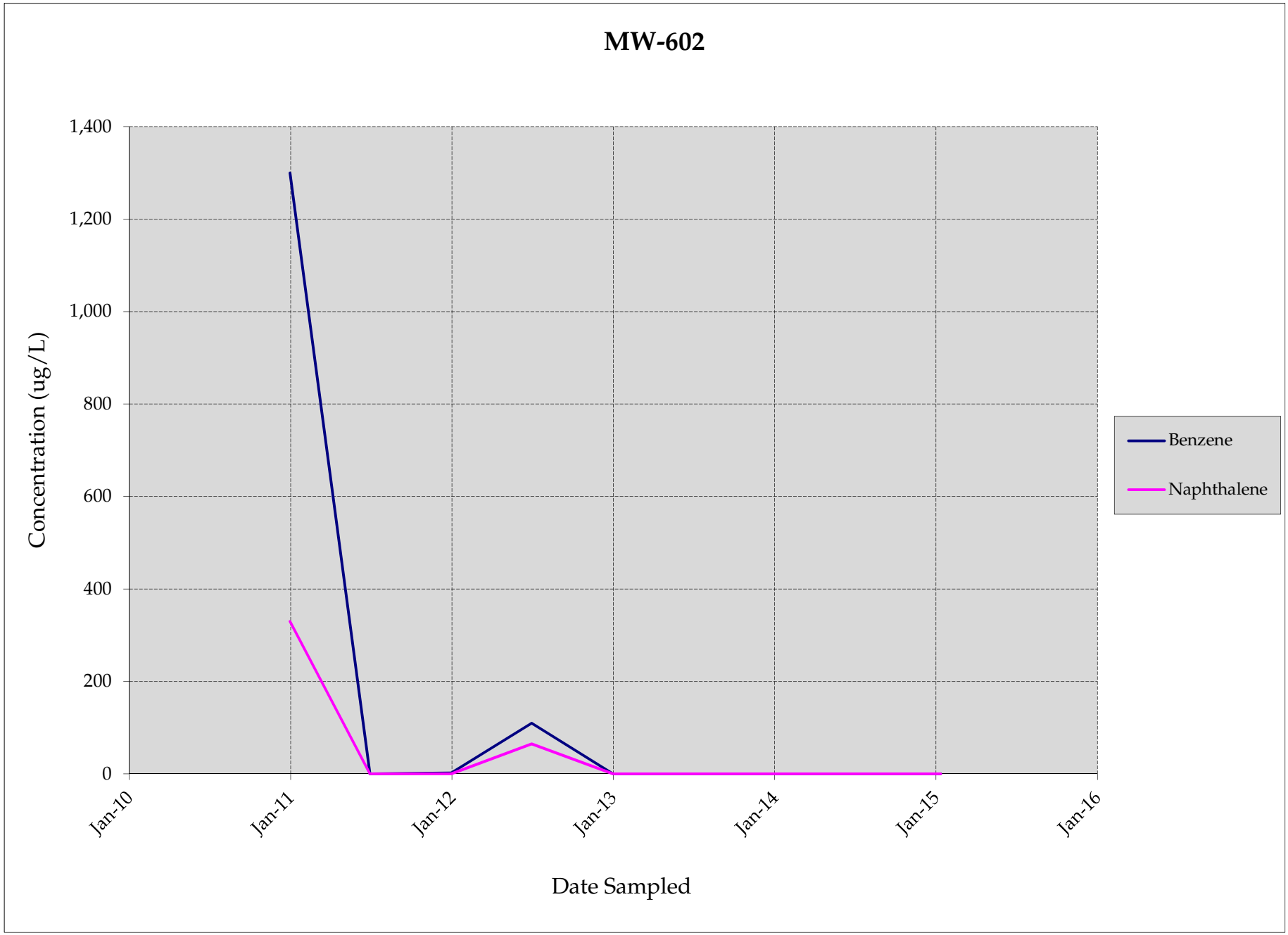

MW-510BR
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentratrion (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

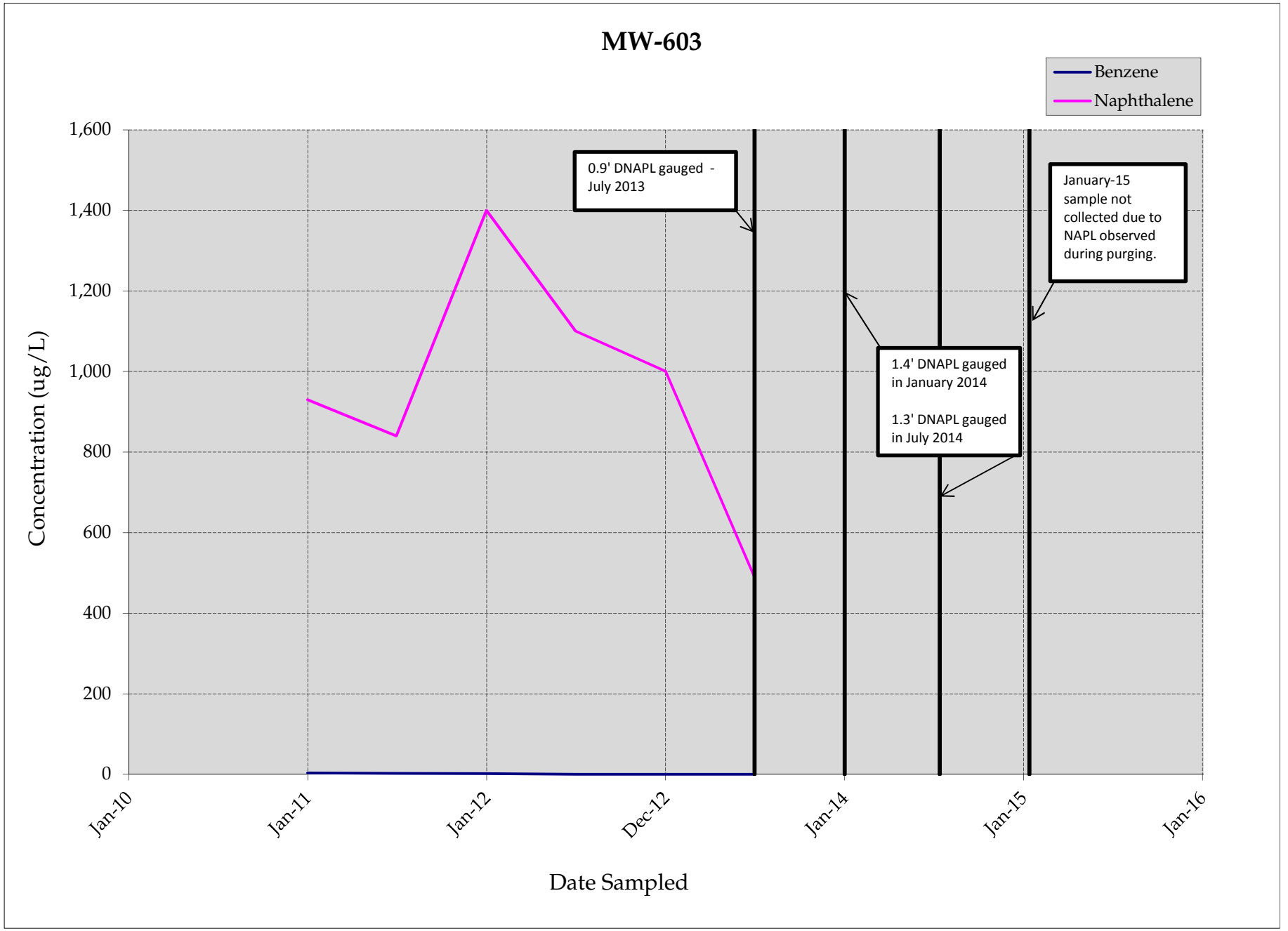

MW-511BR
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-512BR
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Concentration (ug/L)
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-600
60,000
50,000
40,000
30,000
20,000
10,000
0
Concentration (ug/L)
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-601
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Concentration (ug/L)
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene


MW-602
1,400
1,200
1,000
800
600
400
200
0
Concentration (ug/L)
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Date Sampled
Benzene
Naphthalene

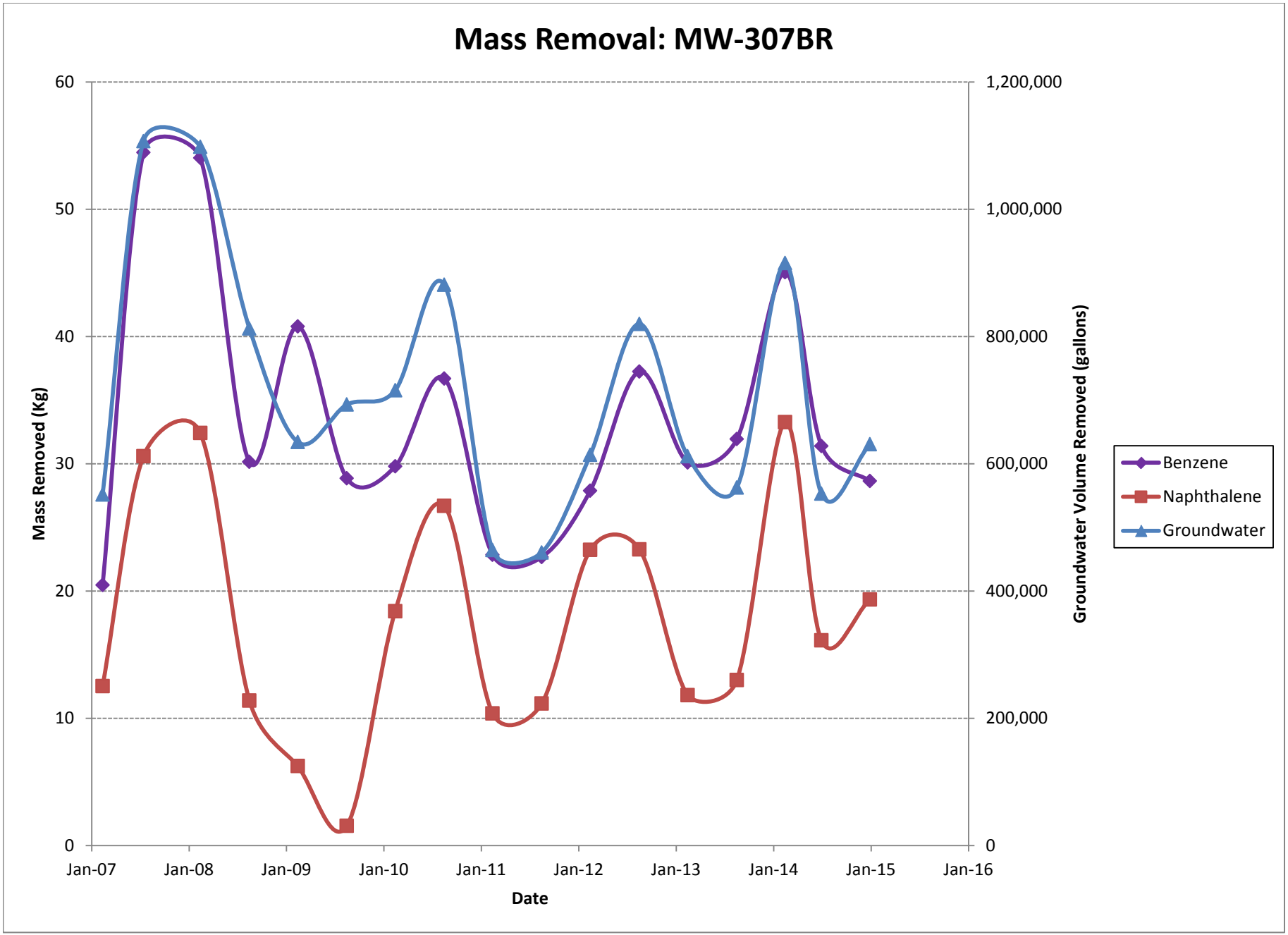

MW-603
Benzene
Naphthalene
1,600
1,400
1,200
1,000
800
600
400
200
0
Concentration (ug/L)
0.9' DNAPL gauged - July 2013
January-15 sample not collected due to NAPL observed during purging.
1.4' DNAPL gauged in January 2014
1.3' DNAPL gauged in July 2014
Jan-10
Jan-11
Jan-12
Dec-12
Jan-14
Jan-15
Jan-16
Date Sampled

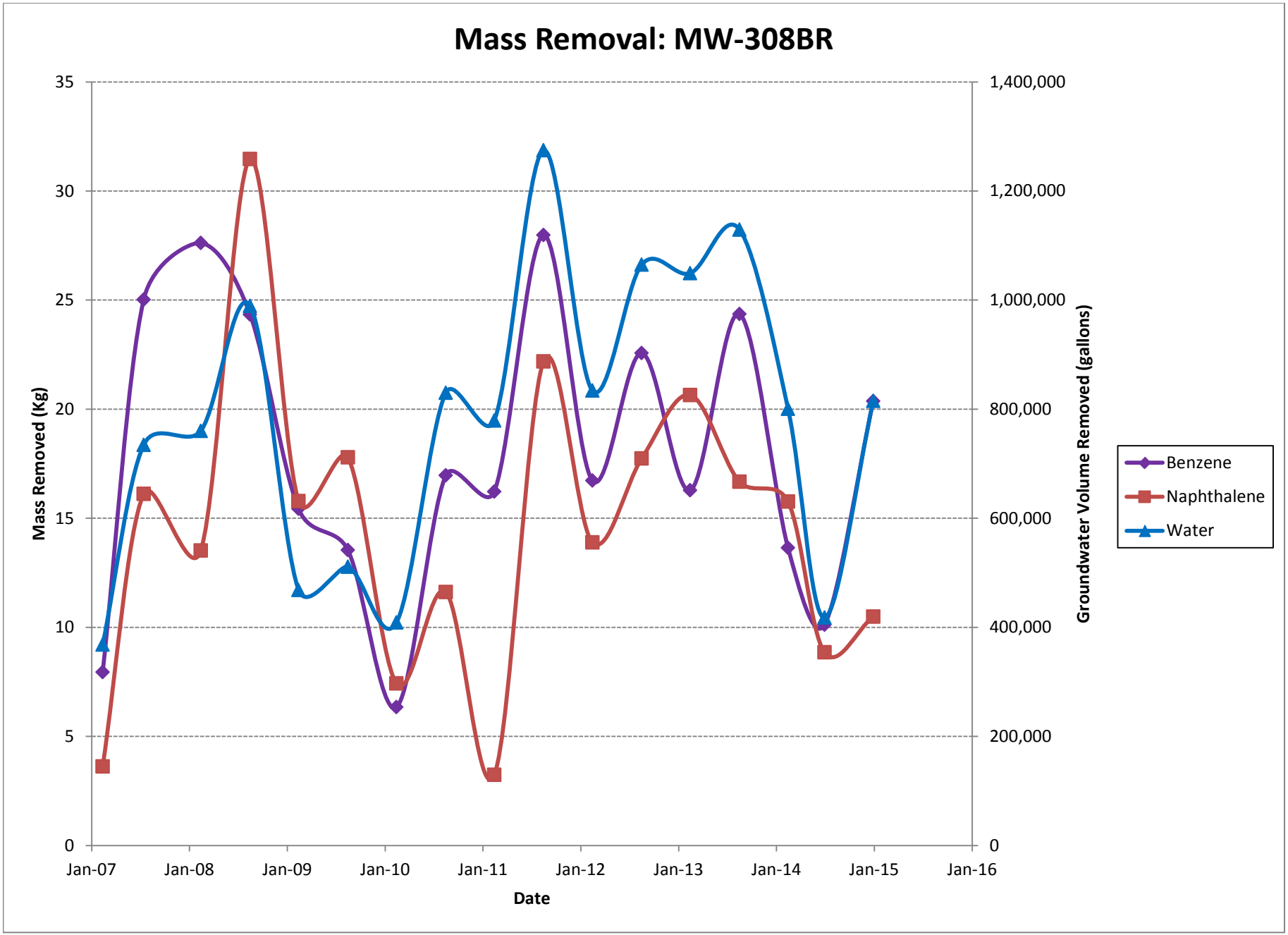
Mass Removal Trend Graphs

Appendix G

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700


Mass Removal: MW-307BR
Mass Removed (Kg)
Groundwater Volume Removed (gallons)
Date
Benzene
Naphthalene
Groundwater
60
50
40
30
20
10
0
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16


Mass Removal: MW-308BR
Mass Removed (kg)
Groundwater Volume Removed (gallons)
Date
Benzene
Naphthalene
Water
0
5
10
15
20
25
30
35
0
200,000
400,000
600,000
800,000
1,000,000
1,200,000
1,400,000
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16

Continuing Action Monitoring Plan Inspection

Appendix H

May 29, 2015
Project No. 0280918
AGL Resources

Environmental Resources Management
3200 Windy Hill Rd. Suite 1500W
Atlanta, GA 30339
(678) 486-2700

Photograph: *1*	***North Parcel facing north-northwest***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *2*	***North Parcel + Reach E South of canal facing north-northwest***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *3*	***8th Street between Taylor St. and Walton Way facing north***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *4*	***Example of permanent signage on Northern Parcel and Carwash Property***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *5*	***ROW north of Taylor St. south of Block E facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *6*	***ROW south of Taylor St. north of South Parcel facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *7*	***Parcel 362 facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *8*	***Parcel 340 and 341 facing west***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *9*	***King Street south of Taylor Street facing south***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *10*	***Walton Way west of intersection with 8th Street facing west***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *11*	***Carwash Property facing west***	
Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *12*	***Parcel 764 facing northwest***	
Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *13*	***Permanent sign for underground electrical vault in intersection of 9th & Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *14*	***Underground electrical vault in intersection of 9th & Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *15*	***Fenwick Street facing east toward intersection with 8th Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *16*	***8th Street facing south away from intersection with Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *17*	***Intersection of 8th and Fenwick Street***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *18*	***CSX Area facing southeast***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *19*	***Parcel 98 (Teresa's Warehouse) facing south***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

Photograph: *20*	***Parcel 53.1 (Joe Thompson Parking) facing east***

Atlanta Gas Light Company *March 2015 CAMP Report*	ERM	*Former MGP Site* *Augusta, Georgia*

TABLE 1

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 5 Parcels (Northern Parcel)
Institutional and Engineering Controls

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 5 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Excavation w/in ISS Limits	X			
Land Disturbing Activities		X		needs reseeding along new sidewalk
New Utility Installations		X		unguarding conduit sticking up along new sidewalk potential tripping hazard.
Residential Use Requirements/Barrier	X			
Permanent Markers		X		One sign along western side laying down
Other				
TYPE 5 ENGINEERING CONTROLS				
Soil Cover (Condition, Disturbed, Maintained)		X		erosion in process along new sidewalk
Vegetative Cover (Condition)		X		need reseeding along new sidewalk
Functionally Equivalent Controls In-Place	X			
Other			X	silt fence along new sidewalk compromised

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 2

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 5 Property (Car Wash Area)
Institutional and Engineering Controls

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 5 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Excavation w/in ISS Limits	X			
Land Disturbing Activities		X		around new sidewalk needs seeding
New Utility Installations		X		lamp post conduit needs cordone
Residential Use Requirements/Barrier	X			
Permanent Markers	X			Signage visible and in good condition
Other				
TYPE 5 ENGINEERING CONTROLS				
Soil Cover (Condition, Disturbed, Maintained)		X		disturbed and needs more cover
Vegetative Cover (Condition)		X		erosion
Functionally Equivalent Controls In-Place	X			
Other			X	break in silt fence near MW-603

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 3

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 5 Property (Georgia Power Vault)
Institutional and Engineering Controls

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 5 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Excavation w/in ISS Limits	X			
Land Disturbing Activities		X		new sidewalk along canal
New Utility Installations		X		holes and conduit for new lamp posts
Residential Use Requirements/Barrier	X			
Permanent Markers	X			Signage visible and in good condition
Other				
TYPE 5 ENGINEERING CONTROLS				
Soil Cover (Condition, Disturbed, Maintained)		X		disturbed
Vegetative Cover (Condition)		X		needs seeding
Functionally Equivalent Controls In-Place	X			
Other			X	silt fence near MW-603 needs fixing

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Locations: Fenwick & 8th Streets)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-2

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Location: Walton Way)
Institutional and Engineering Controls
Street Right-of-Way Location

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-3

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Location: 8th Street)
Institutional and Engineering Controls
Street Right-of-Way Location

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion		X		ROW across from Taylor street needs seeding
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-4

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Taylor Street)
Institutional and Engineering Controls
Street Right-of-Way Locations (north and south of Tayor Street)

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 4-5

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (City of Augusta Street Location: King Street)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			Good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-1

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 53.1)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion		X		needs gravel around sidewalk or vegetation
Other			X	open trench for lamp post conduit needs cordone

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-2

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 98)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion		X		around new sidewalk needs vegetation.
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-3

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 764)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-4

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 362)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-5

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (Parcel 340 and 341)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

TABLE 5-6

AGLC Augusta MGP Project
Semi-Annual Monitoring Form
Type 4 Properties (CSX Area)
Institutional and Engineering Controls
Street Right-of-Way Locations

MONITORING ITEM	CONDITION[1]			COMMENTS
	NA	MN	IA	
TYPE 4 INSTITUTIONAL CONTROLS				
Groundwater Restriction	X			
Non-Residential Restrictions	X			
Erosion	X			good cover- no erosion noted
Other				

Monitoring Performed By: Donald Dowling Date: January 14, 2015

Notes:
1 - NA - no action needed, MN- maintenance needed, IA - immediate action needed

Georgia Department of Natural Resources
2 Martin Luther King Jr. Drive, Suite 1154, Atlanta, Georgia 30334
Noel Holcomb, Commissioner
Environmental Protection Division
Carol A. Couch, Ph.D., Director404/656-7802

November 30, 2004

VIA FACSIMILE AND CERTIFIED MAIL
Return Receipt Requested

Mr. J. Leonard Ledbetter
Executive Vice President
MACTEC Engineering and Consulting, Inc.
3200 Town Point Drive NW, Suite 100
Kennesaw, Georgia 30144

Subject: Atlanta Gas Light–Augusta MGP
Basis of Design Work Plan-Bedrock
Ground Water Recovery System

Dear Mr. Ledbetter:

In order to allow your contractor to begin work in an expeditious manner, the Georgia Environmental Protection Division hereby approves the changes in the workplan pertaining to this system. However, the following issues/conditions will need to be addressed prior to initiating bedrock groundwater extraction:

1) The facility needs to clarify where in situ chemical oxidation is being applied to the upper zones of potential bedrock conduit source areas (i.e. Block E and Southern Parcel, etc.) and how extraction well operation will minimize contaminant/source migration.

2) There is some confusion about the use of the words "benzene plume". The plume of groundwater contamination in bedrock includes benzene, but also includes naphthalene, ethylbenzene and phenanthrene at concentrations above Type 1 RRS. As addressed in the CAP and confirmed with Steve Youngs on November 30, 2004, semi-annual monitoring for all MGP constituents will continue as normal. Specific performance monitoring during the initial operation of the system will focus on benzene and will be covered in a performance monitoring plan to be submitted to EPD for approval prior to commencing extraction of groundwater from the bedrock zone.

Should you have other questions, please contact me at (404) 657-8612.

Sincerely,

Bill Mundy

Bill Mundy
Manager, Corrective Action Program
Environmental Protection Division

Georgia Department of Natural Resources
2 Martin Luther King Jr. Drive, S.E., Suite 1154, Atlanta, Georgia 30334
Noel Holcomb, Commissioner
Environmental Protection Division
Carol A. Couch, Ph.D., Director
404/656-7802

COPY

October 17, 2005

CERTIFIED MAIL
Return Receipt Requested

Mr. Ira Pearl
Vice President
Engineering
AGL Resources
P.O. Box 4569
Atlanta, Georgia 30302

Re: AGLC - Augusta MGP Walton Way
ISCO Treatment

Dear Mr. Pearl:

The Georgia Environmental Protection Division (EPD) has received and reviewed Atlanta Gas Light Company's (AGLC) September 21, 2005 letter regarding the status of ISCO treatment at the Augusta Manufactured Gas Plant (MGP) site, which was submitted by MACTEC Engineering and Consulting (MACTEC). The letter and discussions with representatives of MACTEC indicate the treatment effectiveness of the current system has reached asymptotic levels, as partially demonstrated by the large number of surface expressions, soil caving and preferential pathways that developed along Walton Way. Additionally, the letter identifies that some areas have been treated with twice the volume of peroxide the pilot study indicated was necessary to achieve cleanup criteria.

EPD concurs that ISCO injection may be suspended due to the system's stated limitations, however, in order to monitor the long-term groundwater quality in these areas and maintain compliance with Type 5 continuing monitoring plan criteria, it is necessary for AGLC to replace a number of monitoring wells destroyed as part of corrective activities at the site. The actual number, depth and location of replacement wells must be discussed and approved by EPD prior to installation, and must occur no later than January 31, 2006.

If you have questions concerning this letter, please contact John Fonk at (404) 656-7802.

Sincerely,

Bill Mundy
Program Manager
Corrective Action Program

cc: Leonard Ledbetter – Mactec

File: Atlanta Gas Light - Augusta (R)

Georgia Department of Natural Resources

2 Martin Luther King Jr. Drive, S.E., Suite 1154, Atlanta, Georgia 30334
Noel Holcomb, Commissioner
Environmental Protection Division
Carol A. Couch, Ph.D., Director
404/656-7802

Post-it® Fax Note 7671	Date 2/24/06	# of pages ▶ 1
To LEONARD LEDBETTER	From JOHN FONK	
Co./Dept. MACTEC	Co. GA EPD	
Phone #	Phone # 404-657-8671	
Fax # 770-499-6601	Fax #	

February 24, 2006

VIA CERTIFIED MAIL
Return Receipt Requested

Mr. Ira Pearl
Vice President
AGL Resources
P.O. Box 4569
Atlanta, Georgia 30302-4569

Re: On-Site Type 5 Property Certification
Atlanta Gas Light Co - Augusta MGP
Tax ID No. PIN 047-3-225-00-0
HSI #10132

Dear Mr. Pearl:

The Georgia Environmental Protection Division (EPD) has completed its review of Atlanta Gas Light Company's (AGLC) Corrective Action Closure Report and Compliance Status Report Northern Parcel Operable Units 1 and 2 (Closure Report) received October 24, 2005 and Compliance Status Certification submitted on February 9, 2006. AGLC has certified the Northern Parcel is in compliance with the Type 5 Risk Reduction Standards (RRS) of the Rules for Hazardous Site Response (Rules). EPD approves the Closure Report and concurs with your certification. According to AGLC, the Tax I.D. Number for the Type 5 parcel is 047-3-225-00-0. The following items remain to be addressed by AGLC within 60 days of the date of this letter:

1. If applicable, existing property notices identified in Section 391-3-19-.08 of the Rules (i.e. restrictive covenant and affidavit) must be replaced with revised notices. Copies of the replacement documents must be submitted to EPD.
2. Place the permanent markers called for in 391-3-19-.08(7)(d).
3. A Continuing Action Monitoring Plan for all parcels meeting non-residential risk reduction standards (i.e. Types 3-5) must be submitted to EPD, and should include all specific continuing monitoring activities that will be performed for the entire site.

Enclosed is a copy of the public notice that EPD intends to publish as soon as practicable in the Augusta Chronicle. If you have any questions, please contact John Fonk at (404) 657-8671.

Sincerely,

Mark Smith
Chief
Hazardous Waste Management Branch

Enclosure

PUBLIC NOTICE OF EPD'S CONCURRENCE WITH CERTIFICATE OF COMPLIANCE SUBMITTED FOR SITE ON THE HAZARDOUS SITE INVENTORY

This public notice is to inform all interested parties that the Georgia Environmental Protection Division (EPD) has completed its review of the Closure Report/Compliance Status Report received on October 24, 2005 and Certification of Compliance received on February 9, 2006 for the Northern Parcel of the Atlanta Gas Light (AGLC) – Augusta Manufactured Gas Plant (MGP) Site. The Northern Parcel is located adjacent to the intersection of Eighth Street and Walton Way in Augusta, Richmond County, Georgia. The site is listed on the Hazardous Site Inventory (HSI) as No. 10132. EPD concurs with AGLC's determination that parcel ID No. 047-3-225-00-0 is in compliance with the Type 5 Risk Reduction Standards of Rule 391-3-19-.07 of the Rules for Hazardous Site Response. This certification does not include adjacent parcels or the Third Level Canal, which will be addressed separately.

Additional information about this site may be obtained by calling John Fonk of EPD at (404) 656-7802.

Georgia Department of Natural Resources

2 MLK Jr. Drive, S.E., Suite 1154, Atlanta, Georgia 30334
Noel Holcomb, Commissioner
Environmental Protection Division
Carol A. Couch, Ph.D., Director
404/656-7802

MAR 31 2009

March 30, 2009

CERTIFIED MAIL
Return Receipt Requested

Mr. Ira Pearl
Vice President
AGL Resources
P.O. Box 4569
Atlanta, GA 30302-4569

RE: Corrective Action Closure Report and
Compliance Status Report
On-site and Off-site Parcels OU1 and 2
AGLC – Augusta MGP
Order EPD-HW-1390 (HSI #10132)

Dear Mr. Pearl:

The Georgia Environmental Protection Division (EPD) has completed its review of Atlanta Gas Light Company's (AGLC) Corrective Action Closure Report and Compliance Status Report, On-site and Off-site Parcels OU1 and 2 (Closure Report) dated January 16, 2009, and attendant Compliance Status Certification. AGLC has certified that unsaturated soils in On-site and Off-site parcels/properties in OU 1 and 2 are in compliance with applicable Type 2, Type 4, or Type 5 Risk Reduction Standards (RRS) of the Rules for Hazardous Site Response (Rules) for Manufactured Gas Plant (MGP) constituents. EPD approves the Closure Report and concurs with your certification. The following items remain to be addressed by AGLC within 60 days of the date of this letter.

1. A Continuing Action Monitoring Plan (CAMP) for all parcels/properties meeting non-residential risk reduction standards (i.e. Types 3-5) must be submitted to EPD, and should include all specific monitoring activities that will be performed for the entire site.
2. As applicable, existing property notices identified in Section 391-3-19-.08 of the Rules (i.e. restrictive covenants and affidavits) must be replaced with revised notices. Copies of the replacement documents must be included in the site-wide CAMP with clarified descriptions and maps as previously agreed. Additionally, photo documentation of all required Type 5 area signage (including the Georgia Power vault) must be included in the site-wide CAMP.

AGLC will need to provide a comprehensive public notice for this event upon submission of the Groundwater Closure and Compliance Status Report for the Augusta MGP site. Questions regarding this letter may be directed to John Fonk at (404) 656-7802.

Sincerely,

Mark Smith

Mark Smith
Branch Chief
Hazardous Waste Management Branch

cc: Tim Goodson, AGL Resources
Shannon Scruggs, AGL Resources

Georgia Department of Natural Resources

2 MLK Jr. Drive, S.E., Suite 1154, Atlanta, Georgia 30334
Noel Holcomb, Commissioner
Environmental Protection Division
Carol A. Couch, Ph.D., Director
404/656-7802

MAR 31 2009
MAR 31 2009

March 30, 2009

CERTIFIED MAIL
Return Receipt Requested

Mr. Ira Pearl
Vice President
AGL Resources
P.O. Box 4569
Atlanta, GA 30302-4569

RE: Corrective Action Closure Report and
Compliance Status Report
Third Level Canal, OU-3
AGLC – Augusta MGP
Order EPD-HW-1390 (HSI #10132)

Dear Mr. Pearl:

The Georgia Environmental Protection Division (EPD) has completed its review of Atlanta Gas Light Company's (AGLC) Corrective Action Closure Report and Compliance Status Report, Third Level Canal Operable Unit 3 (Closure Report) dated January 16, 2009, and attendant Compliance Status Certification. AGLC has certified that unsaturated soils in parcels/properties bordering the Third Level Canal Operable Unit 3 are in compliance with applicable Type 2 or Type 4 Risk Reduction Standards (RRS) of the Rules for Hazardous Site Response (Rules) for Manufactured Gas Plant (MGP) constituents. EPD approves the Closure Report and concurs with your certification. The following items remain to be addressed by AGLC within 60 days of the date of this letter.

1. A Continuing Action Monitoring Plan (CAMP) for all parcels/properties meeting non-residential risk reduction standards (i.e. Types 3-5) must be submitted to EPD, and should include all specific monitoring activities that will be performed for the entire site.
2. As applicable, existing property notices identified in Section 391-3-19-.08 of the Rules (i.e. restrictive covenants and affidavits) must be replaced with revised notices. Copies of the replacement documents must be included in the site-wide CAMP with clarified descriptions and maps as previously agreed.

AGLC will need to provide a comprehensive public notice for this event upon submission of the Groundwater Closure and Compliance Status Report for the Augusta MGP site. Questions regarding this letter may be directed to John Fonk at (404) 656-7802.

Sincerely,

Mark Smith
Branch Chief
Hazardous Waste Management Branch

cc: Tim Goodson, AGL Resources
Shannon Scruggs, AGL Resources

Georgia Department of Natural Resources
2 Martin Luther King Jr. Drive, S.E.,Atlanta, Georgia 30334-9000
Lonice C. Barrett, Commissioner
Environmental Protection Division
Carol A. Couch, Ph.D., Director
Hazardous Waste Management Branch
Phone 404-656-7802 FAX 404-651-9425

June 14, 2004

Ms. Donna L. Moore
Director, Engineered Solutions
AGL Resources
P.O. Box 4569
Atlanta, Georgia 30302-4569

Re: EPD's Agreement to Changes to AGLC's Approved Basis of Design Work Plan

Dear Ms. Moore:

This acknowledges the Environmental Protection Division's (EPD) receipt of your letter of May 17, 2004 and the subsequent meetings between EPD associates and representatives of AGLC regarding changes to the approved Basis of Design Work Plan (BDWP). Among the reasons for deviating from the approved plan was Atlanta Gas Light Company's (AGLC) ability and willingness to modify its remediation schedule to accommodate changes that Augusta-Richmond County wanted to make to the drainage features of the canal in the same area where AGLC was conducting its remediation. The overall result of these changes is that a larger area of contaminated material was removed than originally required or planned. In addition, reforming the bottom of the canal with concrete and using concrete for a portion of the side-walls created another barrier to minimize the migration of water through any contamination that remains below the canal bottom.

EPD's review of the changes to the BDWP have confirmed that the remediation goals have been met or exceeded in all areas even though there were deviations from the approved BDWP. In fact, the cooperation of AGLC and Augusta-Richmond County resulted in a more thorough cleanup than was necessary. Congratulations to AGLC, Augusta-Richmond County and the contractors involved for demonstrating that a public-private partnership can result in an efficient and effective remediation, while simultaneously improving the infrastructure for the well-being of the surrounding community.

Should you have further questions, please continue to work with Bill Mundy, who can be reached at (404) 657-8612.

Sincerely,

Carol A. Couch, Ph.D.
Director
Environmental Protection Division

BM/mp
c: Tim Goodson
Leonard Ledbetter
File: AGLC-Aynote
Rdrive/Bill/Letters/AGL Resources 60804 ltr.doc

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 26, 2015

David Price
AMEC E&I, Inc. -Kennesaw
1075 Big Shanty Rd NW
Kennesaw GA 30144

TEL: (770) 421-3400
FAX:

RE: AGL Augusta

Dear David Price: Order No: 1503F72

Analytical Environmental Services, Inc. received 3 samples on 3/17/2015 2:40:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Tara Esbeck

Tara Esbeck
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1503F72

Date: 3/17/15 Page 1 of 1

COMPANY: Amec Foster Wheeler E+I
ADDRESS: 1075 Big Shanty Rd Ste 100 Kennesaw, GA 30144
PHONE: 770-421-3400
FAX: 770-421-3486
SAMPLED BY: D Howard / David Price
SIGNATURE: David L Howard

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC	PAH	Total Metals+Hg	Diss Metals+Hg	CN															REMARKS	No # of Containers
	PRESERVATION (See codes)						HCl	I	N	I	Na OH																
1	Trip Blank	3/17/15	—	X		W	3																				2
2	TLC-001	↓	0955	X		SW	3	2	1	1	1																8
3	TLC-002	↓	1015	X		SW	3	2	1	1	1																8
4	Temp Blank																										
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
14																											

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: David L Howard	3/17/15/2:40pm	1: Catoya Reeves	3/17/15 2:40p
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: AGL Augusta
PROJECT #: 6122140098.01.01
SITE ADDRESS: Augusta, GA
SEND REPORT TO: David Price
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any): GA
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I (II) III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 26-Mar-15

Client: AMEC E&I, Inc. -Kennesaw
Project: AGL Augusta
Lab ID: 1503F72

Case Narrative

Per Judy Hartness on 3/18/15 via email, samples 1503F72-002 and -003 were analyzed for Hexavalent Chromium. We proceeded with the analyses out of hold.

Analytical Environmental Services, Inc **Date:** 26-Mar-15

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TRIP BLANK
Project Name:	AGL Augusta	**Collection Date:**	3/17/2015
Lab ID:	1503F72-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
Acetone	BRL		3.2	50	ug/L	204878	1	03/20/2015 12:32	CH
Benzene	BRL		0.61	5.0	ug/L	204878	1	03/20/2015 12:32	CH
Carbon disulfide	BRL		1.9	5.0	ug/L	204878	1	03/20/2015 12:32	CH
Ethylbenzene	BRL		0.29	5.0	ug/L	204878	1	03/20/2015 12:32	CH
Methylene chloride	1.5	J	0.94	5.0	ug/L	204878	1	03/20/2015 12:32	CH
Toluene	BRL		0.49	5.0	ug/L	204878	1	03/20/2015 12:32	CH
Trichloroethene	BRL		0.80	5.0	ug/L	204878	1	03/20/2015 12:32	CH
Surr: 4-Bromofluorobenzene	79		0	70.6-123	%REC	204878	1	03/20/2015 12:32	CH
Surr: Dibromofluoromethane	80.8		0	78.7-124	%REC	204878	1	03/20/2015 12:32	CH
Surr: Toluene-d8	88.7		0	81.3-120	%REC	204878	1	03/20/2015 12:32	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-Mar-15

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TLC-001
Project Name:	AGL Augusta	**Collection Date:**	3/17/2015 9:55:00 AM
Lab ID:	1503F72-002	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A					**(SW3005A)**				
Antimony	0.125	J	0.117	5.00	ug/L	204699	1	03/20/2015 14:56	JS
Arsenic	0.289	J	0.167	5.00	ug/L	204699	1	03/20/2015 14:56	JS
Barium	15.0		0.144	10.0	ug/L	204699	1	03/20/2015 14:56	JS
Beryllium	BRL		0.0949	1.00	ug/L	204699	1	03/20/2015 14:56	JS
Cadmium	BRL		0.122	0.700	ug/L	204699	1	03/20/2015 14:56	JS
Chromium	0.299	J	0.171	5.00	ug/L	204699	1	03/20/2015 14:56	JS
Copper	1.65	J	0.204	2.00	ug/L	204699	1	03/20/2015 14:56	JS
Lead	0.537	J	0.309	1.00	ug/L	204699	1	03/20/2015 14:56	JS
Nickel	0.236	J	0.173	5.00	ug/L	204699	1	03/20/2015 14:56	JS
Selenium	BRL		0.365	5.00	ug/L	204699	1	03/20/2015 14:56	JS
Thallium	BRL		0.0949	1.00	ug/L	204699	1	03/20/2015 14:56	JS
Vanadium	0.488	J	0.106	5.00	ug/L	204699	1	03/20/2015 14:56	JS
Zinc	5.41	J	3.44	10.0	ug/L	204699	1	03/20/2015 14:56	JS
TCL VOLATILE ORGANICS SW8260B					**(SW5030B)**				
Acetone	BRL		3.2	50	ug/L	204878	1	03/20/2015 16:06	CH
Benzene	BRL		0.61	5.0	ug/L	204878	1	03/20/2015 16:06	CH
Carbon disulfide	BRL		1.9	5.0	ug/L	204878	1	03/20/2015 16:06	CH
Ethylbenzene	BRL		0.29	5.0	ug/L	204878	1	03/20/2015 16:06	CH
Methylene chloride	BRL		0.94	5.0	ug/L	204878	1	03/20/2015 16:06	CH
Toluene	BRL		0.49	5.0	ug/L	204878	1	03/20/2015 16:06	CH
Trichloroethene	BRL		0.80	5.0	ug/L	204878	1	03/20/2015 16:06	CH
Surr: 4-Bromofluorobenzene	74.6		0	70.6-123	%REC	204878	1	03/20/2015 16:06	CH
Surr: Dibromofluoromethane	79.8		0	78.7-124	%REC	204878	1	03/20/2015 16:06	CH
Surr: Toluene-d8	87.8		0	81.3-120	%REC	204878	1	03/20/2015 16:06	CH
SIM Polynuclear Aromatic Hydrocarbons SW8270D					**(SW3510C)**				
Naphthalene	BRL		0.021	0.50	ug/L	204763	1	03/23/2015 13:37	YH
Acenaphthylene	BRL		0.0075	1.0	ug/L	204763	1	03/23/2015 13:37	YH
Acenaphthene	BRL		0.0053	0.50	ug/L	204763	1	03/23/2015 13:37	YH
Fluorene	BRL		0.0041	0.10	ug/L	204763	1	03/23/2015 13:37	YH
Phenanthrene	0.056		0.0047	0.050	ug/L	204763	1	03/23/2015 13:37	YH
Anthracene	BRL		0.010	0.050	ug/L	204763	1	03/23/2015 13:37	YH
Fluoranthene	0.084	J	0.0053	0.10	ug/L	204763	1	03/23/2015 13:37	YH
Pyrene	0.051		0.013	0.050	ug/L	204763	1	03/23/2015 13:37	YH
Benz(a)anthracene	0.027	J	0.011	0.050	ug/L	204763	1	03/23/2015 13:37	YH
Chrysene	0.032	J	0.0097	0.050	ug/L	204763	1	03/23/2015 13:37	YH
Benzo(b)fluoranthene	0.030	J	0.011	0.10	ug/L	204763	1	03/23/2015 13:37	YH
Benzo(k)fluoranthene	0.028	J	0.018	0.050	ug/L	204763	1	03/23/2015 13:37	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-Mar-15

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TLC-001
Project Name:	AGL Augusta	**Collection Date:**	3/17/2015 9:55:00 AM
Lab ID:	1503F72-002	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
SIM Polynuclear Aromatic Hydrocarbons SW8270D					**(SW3510C)**				
Benzo(a)pyrene	BRL		0.016	0.050	ug/L	204763	1	03/23/2015 13:37	YH
Indeno(1,2,3-cd)pyrene	BRL		0.035	0.050	ug/L	204763	1	03/23/2015 13:37	YH
Dibenz(a,h)anthracene	BRL		0.015	0.10	ug/L	204763	1	03/23/2015 13:37	YH
Benzo(g,h,i)perylene	BRL		0.040	0.10	ug/L	204763	1	03/23/2015 13:37	YH
Surr: 4-Terphenyl-d14	97		0	55.4-136	%REC	204763	1	03/23/2015 13:37	YH
Mercury, Total SW7470A					**(SW7470A)**				
Mercury	BRL		0.00004	0.00020	mg/L	204756	1	03/23/2015 14:01	TA
Mercury, Dissolved SW7470A					**(SW7470A)**				
Mercury	BRL		0.00004	0.00020	mg/L	204674	1	03/19/2015 15:12	TA
Hexavalent Chromium in Water SW7196A									
Chromium, Hexavalent	BRL	H	0.00130	0.0100	mg/L	R288411	1	03/25/2015 15:00	OM
Dissolved Metals by ICP/MS SW6020A					**(SW3005A)**				
Antimony	BRL		0.117	5.00	ug/L	204563	1	03/18/2015 13:54	JS
Arsenic	0.260	J	0.167	5.00	ug/L	204563	1	03/18/2015 13:54	JS
Barium	14.9		0.144	10.0	ug/L	204563	1	03/18/2015 13:54	JS
Beryllium	BRL		0.0949	1.00	ug/L	204563	1	03/18/2015 13:54	JS
Cadmium	BRL		0.122	0.700	ug/L	204563	1	03/18/2015 13:54	JS
Chromium	BRL		0.171	5.00	ug/L	204563	1	03/18/2015 13:54	JS
Copper	1.32	J	0.204	2.00	ug/L	204563	1	03/18/2015 13:54	JS
Lead	BRL		0.309	1.00	ug/L	204563	1	03/18/2015 13:54	JS
Nickel	0.183	J	0.173	5.00	ug/L	204563	1	03/18/2015 13:54	JS
Selenium	BRL		0.365	5.00	ug/L	204563	1	03/18/2015 13:54	JS
Silver	BRL		0.0251	1.00	ug/L	204563	1	03/18/2015 13:54	JS
Thallium	BRL		0.0949	1.00	ug/L	204563	1	03/18/2015 13:54	JS
Vanadium	0.319	J	0.106	5.00	ug/L	204563	1	03/18/2015 13:54	JS
Zinc	BRL		3.44	10.0	ug/L	204563	1	03/18/2015 13:54	JS
Cyanide SW9014					**(SW9010C)**				
Cyanide, Total	BRL		0.005	0.010	mg/L	204877	1	03/23/2015 14:15	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-Mar-15

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TLC-002
Project Name:	AGL Augusta	**Collection Date:**	3/17/2015 10:15:00 AM
Lab ID:	1503F72-003	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A					**(SW3005A)**				
Antimony	BRL		0.117	5.00	ug/L	204699	1	03/20/2015 15:25	JS
Arsenic	0.213	J	0.167	5.00	ug/L	204699	1	03/20/2015 15:25	JS
Barium	12.7		0.144	10.0	ug/L	204699	1	03/20/2015 15:25	JS
Beryllium	BRL		0.0949	1.00	ug/L	204699	1	03/20/2015 15:25	JS
Cadmium	BRL		0.122	0.700	ug/L	204699	1	03/20/2015 15:25	JS
Chromium	0.267	J	0.171	5.00	ug/L	204699	1	03/20/2015 15:25	JS
Copper	46.2		0.204	2.00	ug/L	204699	1	03/20/2015 15:25	JS
Lead	BRL		0.309	1.00	ug/L	204699	1	03/20/2015 15:25	JS
Nickel	0.203	J	0.173	5.00	ug/L	204699	1	03/20/2015 15:25	JS
Selenium	BRL		0.365	5.00	ug/L	204699	1	03/20/2015 15:25	JS
Thallium	BRL		0.0949	1.00	ug/L	204699	1	03/20/2015 15:25	JS
Vanadium	0.344	J	0.106	5.00	ug/L	204699	1	03/20/2015 15:25	JS
Zinc	BRL		3.44	10.0	ug/L	204699	1	03/20/2015 15:25	JS
TCL VOLATILE ORGANICS SW8260B					**(SW5030B)**				
Acetone	BRL		3.2	50	ug/L	204878	1	03/20/2015 16:30	CH
Benzene	BRL		0.61	5.0	ug/L	204878	1	03/20/2015 16:30	CH
Carbon disulfide	BRL		1.9	5.0	ug/L	204878	1	03/20/2015 16:30	CH
Ethylbenzene	BRL		0.29	5.0	ug/L	204878	1	03/20/2015 16:30	CH
Methylene chloride	BRL		0.94	5.0	ug/L	204878	1	03/20/2015 16:30	CH
Toluene	BRL		0.49	5.0	ug/L	204878	1	03/20/2015 16:30	CH
Trichloroethene	BRL		0.80	5.0	ug/L	204878	1	03/20/2015 16:30	CH
Surr: 4-Bromofluorobenzene	71.8		0	70.6-123	%REC	204878	1	03/20/2015 16:30	CH
Surr: Dibromofluoromethane	79.9		0	78.7-124	%REC	204878	1	03/20/2015 16:30	CH
Surr: Toluene-d8	85.8		0	81.3-120	%REC	204878	1	03/20/2015 16:30	CH
SIM Polynuclear Aromatic Hydrocarbons SW8270D					**(SW3510C)**				
Naphthalene	BRL		0.021	0.50	ug/L	204763	1	03/23/2015 14:03	YH
Acenaphthylene	BRL		0.0075	1.0	ug/L	204763	1	03/23/2015 14:03	YH
Acenaphthene	BRL		0.0053	0.50	ug/L	204763	1	03/23/2015 14:03	YH
Fluorene	BRL		0.0041	0.10	ug/L	204763	1	03/23/2015 14:03	YH
Phenanthrene	0.033	J	0.0047	0.050	ug/L	204763	1	03/23/2015 14:03	YH
Anthracene	BRL		0.010	0.050	ug/L	204763	1	03/23/2015 14:03	YH
Fluoranthene	0.051	J	0.0053	0.10	ug/L	204763	1	03/23/2015 14:03	YH
Pyrene	0.039	J	0.013	0.050	ug/L	204763	1	03/23/2015 14:03	YH
Benz(a)anthracene	0.026	J	0.011	0.050	ug/L	204763	1	03/23/2015 14:03	YH
Chrysene	0.029	J	0.0097	0.050	ug/L	204763	1	03/23/2015 14:03	YH
Benzo(b)fluoranthene	0.035	J	0.011	0.10	ug/L	204763	1	03/23/2015 14:03	YH
Benzo(k)fluoranthene	0.028	J	0.018	0.050	ug/L	204763	1	03/23/2015 14:03	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-Mar-15

Client:	AMEC E&I, Inc. -Kennesaw	**Client Sample ID:**	TLC-002
Project Name:	AGL Augusta	**Collection Date:**	3/17/2015 10:15:00 AM
Lab ID:	1503F72-003	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
SIM Polynuclear Aromatic Hydrocarbons SW8270D					**(SW3510C)**				
Benzo(a)pyrene	BRL		0.016	0.050	ug/L	204763	1	03/23/2015 14:03	YH
Indeno(1,2,3-cd)pyrene	BRL		0.035	0.050	ug/L	204763	1	03/23/2015 14:03	YH
Dibenz(a,h)anthracene	BRL		0.015	0.10	ug/L	204763	1	03/23/2015 14:03	YH
Benzo(g,h,i)perylene	BRL		0.040	0.10	ug/L	204763	1	03/23/2015 14:03	YH
Surr: 4-Terphenyl-d14	97.3		0	55.4-136	%REC	204763	1	03/23/2015 14:03	YH
Mercury, Total SW7470A					**(SW7470A)**				
Mercury	BRL		0.00004	0.00020	mg/L	204756	1	03/23/2015 14:03	TA
Mercury, Dissolved SW7470A					**(SW7470A)**				
Mercury	BRL		0.00004	0.00020	mg/L	204674	1	03/19/2015 15:05	TA
Hexavalent Chromium in Water SW7196A									
Chromium, Hexavalent	0.00220	JH	0.00130	0.0100	mg/L	R288411	1	03/25/2015 15:00	OM
Dissolved Metals by ICP/MS SW6020A					**(SW3005A)**				
Antimony	BRL		0.117	5.00	ug/L	204563	1	03/18/2015 14:00	JS
Arsenic	0.225	J	0.167	5.00	ug/L	204563	1	03/18/2015 14:00	JS
Barium	12.7		0.144	10.0	ug/L	204563	1	03/18/2015 14:00	JS
Beryllium	BRL		0.0949	1.00	ug/L	204563	1	03/18/2015 14:00	JS
Cadmium	BRL		0.122	0.700	ug/L	204563	1	03/18/2015 14:00	JS
Chromium	BRL		0.171	5.00	ug/L	204563	1	03/18/2015 14:00	JS
Copper	1.11	J	0.204	2.00	ug/L	204563	1	03/18/2015 14:00	JS
Lead	BRL		0.309	1.00	ug/L	204563	1	03/18/2015 14:00	JS
Nickel	BRL		0.173	5.00	ug/L	204563	1	03/18/2015 14:00	JS
Selenium	BRL		0.365	5.00	ug/L	204563	1	03/18/2015 14:00	JS
Silver	BRL		0.0251	1.00	ug/L	204563	1	03/18/2015 14:00	JS
Thallium	BRL		0.0949	1.00	ug/L	204563	1	03/18/2015 14:00	JS
Vanadium	0.225	J	0.106	5.00	ug/L	204563	1	03/18/2015 14:00	JS
Zinc	BRL		3.44	10.0	ug/L	204563	1	03/18/2015 14:00	JS
Cyanide SW9014					**(SW9010C)**				
Cyanide, Total	BRL		0.005	0.010	mg/L	204877	1	03/23/2015 14:15	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Amec Work Order Number 1503F72

Checklist completed by Jason B 3/17/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by JB

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Analytical Environmental Services, Inc

Date: 26-Mar-15

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Lab Order: 1503F72

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1503F72-001A	TRIP BLANK	3/17/2015 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		3/20/2015 11:00:00 AM	03/20/2015
1503F72-002A	TLC-001	3/17/2015 9:55:00AM	Surface Water	TCL VOLATILE ORGANICS		3/20/2015 11:00:00 AM	03/20/2015
1503F72-002B	TLC-001	3/17/2015 9:55:00AM	Surface Water	Total Metals by ICP/MS		3/19/2015 1:30:00 PM	03/20/2015
1503F72-002B	TLC-001	3/17/2015 9:55:00AM	Surface Water	TOTAL MERCURY		3/23/2015 9:45:00 AM	03/23/2015
1503F72-002C	TLC-001	3/17/2015 9:55:00AM	Surface Water	Dissolved Metals by ICP/MS		3/17/2015 5:30:00 PM	03/18/2015
1503F72-002C	TLC-001	3/17/2015 9:55:00AM	Surface Water	Hexavalent Chromium			03/25/2015
1503F72-002C	TLC-001	3/17/2015 9:55:00AM	Surface Water	MERCURY, DISSOLVED		3/19/2015 10:45:00 AM	03/19/2015
1503F72-002D	TLC-001	3/17/2015 9:55:00AM	Surface Water	Polynuclear Aromatic Hydrocarbons		3/23/2015 11:00:00 AM	03/23/2015
1503F72-002E	TLC-001	3/17/2015 9:55:00AM	Surface Water	Cyanide		3/23/2015 12:00:00 PM	03/23/2015
1503F72-003A	TLC-002	3/17/2015 10:15:00AM	Surface Water	TCL VOLATILE ORGANICS		3/20/2015 11:00:00 AM	03/20/2015
1503F72-003B	TLC-002	3/17/2015 10:15:00AM	Surface Water	Total Metals by ICP/MS		3/19/2015 1:30:00 PM	03/20/2015
1503F72-003B	TLC-002	3/17/2015 10:15:00AM	Surface Water	TOTAL MERCURY		3/23/2015 9:45:00 AM	03/23/2015
1503F72-003C	TLC-002	3/17/2015 10:15:00AM	Surface Water	Dissolved Metals by ICP/MS		3/17/2015 5:30:00 PM	03/18/2015
1503F72-003C	TLC-002	3/17/2015 10:15:00AM	Surface Water	Hexavalent Chromium			03/25/2015
1503F72-003C	TLC-002	3/17/2015 10:15:00AM	Surface Water	MERCURY, DISSOLVED		3/19/2015 10:45:00 AM	03/19/2015
1503F72-003D	TLC-002	3/17/2015 10:15:00AM	Surface Water	Polynuclear Aromatic Hydrocarbons		3/23/2015 11:00:00 AM	03/23/2015
1503F72-003E	TLC-002	3/17/2015 10:15:00AM	Surface Water	Cyanide		3/23/2015 12:00:00 PM	03/23/2015

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204563

Sample ID: **MB-204563** Client ID: Units: **ug/L** Prep Date: **03/17/2015** Run No: **287753**
SampleType: **MBLK** TestCode: **Dissolved Metals by ICP/MS SW6020A** BatchID: **204563** Analysis Date: **03/17/2015** Seq No: **6112240**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	10.0									
Beryllium	BRL	1.00									
Cadmium	BRL	0.700									
Chromium	BRL	5.00									
Copper	BRL	2.00									
Lead	BRL	1.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	1.00									
Thallium	BRL	1.00									
Vanadium	BRL	5.00									
Zinc	BRL	10.0									

Sample ID: **LCS-204563** Client ID: Units: **ug/L** Prep Date: **03/17/2015** Run No: **287753**
SampleType: **LCS** TestCode: **Dissolved Metals by ICP/MS SW6020A** BatchID: **204563** Analysis Date: **03/17/2015** Seq No: **6112239**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	91.58	5.00	100.0		91.6	80	120				
Arsenic	88.40	5.00	100.0		88.4	80	120				
Barium	92.96	10.0	100.0		93.0	80	120				
Beryllium	85.24	1.00	100.0		85.2	80	120				
Cadmium	90.00	0.700	100.0		90.0	80	120				
Chromium	87.45	5.00	100.0		87.4	80	120				
Copper	88.45	2.00	100.0		88.4	80	120				
Lead	97.32	1.00	100.0		97.3	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204563

Sample ID: **LCS-204563** Client ID: Units: **ug/L** Prep Date: **03/17/2015** Run No: **287753**
SampleType: **LCS** TestCode: **Dissolved Metals by ICP/MS SW6020A** BatchID: **204563** Analysis Date: **03/17/2015** Seq No: **6112239**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nickel	88.24	5.00	100.0		88.2	80	120				
Selenium	86.45	5.00	100.0		86.5	80	120				
Silver	9.139	1.00	10.00		91.4	80	120				
Thallium	97.22	1.00	100.0		97.2	80	120				
Vanadium	86.68	5.00	100.0		86.7	80	120				
Zinc	87.48	10.0	100.0		87.5	80	120				

Sample ID: **1503E79-001BMS** Client ID: Units: **ug/L** Prep Date: **03/17/2015** Run No: **287753**
SampleType: **MS** TestCode: **Dissolved Metals by ICP/MS SW6020A** BatchID: **204563** Analysis Date: **03/17/2015** Seq No: **6112242**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	88.85	5.00	100.0		88.9	75	125				
Arsenic	88.88	5.00	100.0		88.9	75	125				
Barium	127.8	10.0	100.0	36.36	91.4	75	125				
Beryllium	79.96	1.00	100.0		80.0	75	125				
Cadmium	91.71	0.700	100.0		91.7	75	125				
Chromium	87.22	5.00	100.0	0.2197	87.0	75	125				
Copper	88.94	2.00	100.0	1.429	87.5	75	125				
Lead	92.79	1.00	100.0		92.8	75	125				
Nickel	89.12	5.00	100.0	2.865	86.3	75	125				
Selenium	90.60	5.00	100.0		90.6	75	125				
Silver	0.7614	0.100	10.00		7.61	75	125				S
Thallium	93.87	1.00	100.0	0.09992	93.8	75	125				
Vanadium	86.84	5.00	100.0		86.8	75	125				
Zinc	95.70	10.0	100.0	8.259	87.4	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204563

Sample ID: **1503E79-001BMSD** Client ID:
SampleType: **MSD** TestCode: **Dissolved Metals by ICP/MS SW6020A**
Units: **ug/L** Prep Date: **03/17/2015** Run No: **287753**
BatchID: **204563** Analysis Date: **03/17/2015** Seq No: **6112243**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	92.43	5.00	100.0		92.4	75	125	88.85	3.95	20	
Arsenic	92.91	5.00	100.0		92.9	75	125	88.88	4.43	20	
Barium	132.4	10.0	100.0	36.36	96.1	75	125	127.8	3.56	20	
Beryllium	74.26	1.00	100.0		74.3	75	125	79.96	7.40	20	S
Cadmium	86.87	0.700	100.0		86.9	75	125	91.71	5.42	20	
Chromium	90.49	5.00	100.0	0.2197	90.3	75	125	87.22	3.68	20	
Copper	93.07	2.00	100.0	1.429	91.6	75	125	88.94	4.54	20	
Lead	94.31	1.00	100.0		94.3	75	125	92.79	1.63	20	
Nickel	91.77	5.00	100.0	2.865	88.9	75	125	89.12	2.93	20	
Selenium	93.97	5.00	100.0		94.0	75	125	90.60	3.66	20	
Silver	1.575	0.100	10.00		15.7	75	125	0.7614	69.6	20	SR
Thallium	96.17	1.00	100.0	0.09992	96.1	75	125	93.87	2.42	20	
Vanadium	90.47	5.00	100.0		90.5	75	125	86.84	4.10	20	
Zinc	100.0	10.0	100.0	8.259	91.8	75	125	95.70	4.42	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204674

Sample ID: **MB-204674**	Client ID:			Units: **mg/L**	Prep Date: **03/19/2015**	Run No: **287965**
SampleType: **MBLK**	TestCode: **Mercury, Dissolved SW7470A**			BatchID: **204674**	Analysis Date: **03/19/2015**	Seq No: **6117732**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-204674**	Client ID:			Units: **mg/L**	Prep Date: **03/19/2015**	Run No: **287965**
SampleType: **LCS**	TestCode: **Mercury, Dissolved SW7470A**			BatchID: **204674**	Analysis Date: **03/19/2015**	Seq No: **6117733**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005385	0.00020	0.0050		108	80	120				

Sample ID: **1503F72-003CMS**	Client ID: **TLC-002**			Units: **mg/L**	Prep Date: **03/19/2015**	Run No: **287965**
SampleType: **MS**	TestCode: **Mercury, Dissolved SW7470A**			BatchID: **204674**	Analysis Date: **03/19/2015**	Seq No: **6117735**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005458	0.00020	0.0050		109	70	130				

Sample ID: **1503F72-003CMSD**	Client ID: **TLC-002**			Units: **mg/L**	Prep Date: **03/19/2015**	Run No: **287965**
SampleType: **MSD**	TestCode: **Mercury, Dissolved SW7470A**			BatchID: **204674**	Analysis Date: **03/19/2015**	Seq No: **6117736**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004867	0.00020	0.0050		97.3	70	130	0.005458	11.4	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204699

Sample ID: **MB-204699** Client ID: Units: **ug/L** Prep Date: **03/19/2015** Run No: **288154**
SampleType: **MBLK** TestCode: **Total Metals by ICP/MS SW6020A** BatchID: **204699** Analysis Date: **03/20/2015** Seq No: **6121224**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	0.2465	10.0									J
Beryllium	BRL	1.00									
Cadmium	BRL	0.700									
Chromium	BRL	5.00									
Copper	BRL	2.00									
Lead	BRL	1.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Thallium	BRL	1.00									
Vanadium	BRL	5.00									
Zinc	BRL	10.0									

Sample ID: **LCS-204699** Client ID: Units: **ug/L** Prep Date: **03/19/2015** Run No: **288154**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020A** BatchID: **204699** Analysis Date: **03/20/2015** Seq No: **6121223**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	96.13	5.00	100.0		96.1	80	120				
Arsenic	95.09	5.00	100.0		95.1	80	120				
Barium	97.65	10.0	100.0	0.2465	97.4	80	120				
Beryllium	90.27	1.00	100.0		90.3	80	120				
Cadmium	99.61	0.700	100.0		99.6	80	120				
Chromium	93.21	5.00	100.0		93.2	80	120				
Copper	102.2	2.00	100.0		102	80	120				
Lead	94.10	1.00	100.0		94.1	80	120				
Nickel	100.5	5.00	100.0		101	80	120				
Selenium	95.42	5.00	100.0		95.4	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204699

Sample ID: **LCS-204699** Client ID: Units: **ug/L** Prep Date: **03/19/2015** Run No: **288154**
SampleType: **LCS** TestCode: **Total Metals by ICP/MS SW6020A** BatchID: **204699** Analysis Date: **03/20/2015** Seq No: **6121223**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Thallium	94.19	1.00	100.0		94.2	80	120				
Vanadium	94.89	5.00	100.0		94.9	80	120				
Zinc	96.05	10.0	100.0		96.0	80	120				

Sample ID: **1503F43-036AMS** Client ID: Units: **ug/L** Prep Date: **03/19/2015** Run No: **288154**
SampleType: **MS** TestCode: **Total Metals by ICP/MS SW6020A** BatchID: **204699** Analysis Date: **03/20/2015** Seq No: **6121226**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	101.6	5.00	100.0		102	75	125				
Arsenic	98.53	5.00	100.0		98.5	75	125				
Barium	156.7	10.0	100.0	47.86	109	75	125				
Beryllium	91.13	1.00	100.0	0.2121	90.9	75	125				
Cadmium	100.6	0.700	100.0	0.9747	99.6	75	125				
Chromium	96.70	5.00	100.0	0.6264	96.1	75	125				
Copper	109.1	2.00	100.0	1.598	107	75	125				
Lead	98.12	1.00	100.0		98.1	75	125				
Nickel	107.2	5.00	100.0	1.238	106	75	125				
Selenium	98.22	5.00	100.0		98.2	75	125				
Thallium	97.99	1.00	100.0		98.0	75	125				
Vanadium	101.9	5.00	100.0	0.8068	101	75	125				
Zinc	106.3	10.0	100.0	7.124	99.1	75	125				

Sample ID: **1503F43-036AMSD** Client ID: Units: **ug/L** Prep Date: **03/19/2015** Run No: **288154**
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020A** BatchID: **204699** Analysis Date: **03/20/2015** Seq No: **6121227**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Antimony	95.91	5.00	100.0		95.9	75	125	101.6	5.80	20	
Arsenic	94.66	5.00	100.0		94.7	75	125	98.53	4.00	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204699

Sample ID: **1503F43-036AMSD** Client ID:
SampleType: **MSD** TestCode: **Total Metals by ICP/MS SW6020A**
Units: **ug/L** Prep Date: **03/19/2015** Run No: **288154**
BatchID: **204699** Analysis Date: **03/20/2015** Seq No: **6121227**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Barium	147.3	10.0	100.0	47.86	99.5	75	125	156.7	6.16	20	
Beryllium	89.51	1.00	100.0	0.2121	89.3	75	125	91.13	1.80	20	
Cadmium	98.23	0.700	100.0	0.9747	97.3	75	125	100.6	2.39	20	
Chromium	91.70	5.00	100.0	0.6264	91.1	75	125	96.70	5.30	20	
Copper	104.8	2.00	100.0	1.598	103	75	125	109.1	3.97	20	
Lead	94.59	1.00	100.0		94.6	75	125	98.12	3.67	20	
Nickel	103.6	5.00	100.0	1.238	102	75	125	107.2	3.40	20	
Selenium	95.11	5.00	100.0		95.1	75	125	98.22	3.22	20	
Thallium	95.00	1.00	100.0		95.0	75	125	97.99	3.10	20	
Vanadium	99.68	5.00	100.0	0.8068	98.9	75	125	101.9	2.23	20	
Zinc	110.0	10.0	100.0	7.124	103	75	125	106.3	3.44	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204756

Sample ID: **MB-204756**	Client ID:				Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288139**
SampleType: **MBLK**	TestCode: **Mercury, Total SW7470A**				BatchID: **204756**		Analysis Date: **03/23/2015**		Seq No: **6122484**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-204756**	Client ID:				Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288139**
SampleType: **LCS**	TestCode: **Mercury, Total SW7470A**				BatchID: **204756**		Analysis Date: **03/23/2015**		Seq No: **6122485**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005120	0.00020	0.0050		102	80	120				

Sample ID: **1503F43-038AMS**	Client ID:				Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288139**
SampleType: **MS**	TestCode: **Mercury, Total SW7470A**				BatchID: **204756**		Analysis Date: **03/23/2015**		Seq No: **6122490**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005151	0.00020	0.0050		103	70	130				

Sample ID: **1503F43-038AMSD**	Client ID:				Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288139**
SampleType: **MSD**	TestCode: **Mercury, Total SW7470A**				BatchID: **204756**		Analysis Date: **03/23/2015**		Seq No: **6122492**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004792	0.00020	0.0050		95.8	70	130	0.005151	7.23	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204763

Sample ID: **MB-204763** Client ID: Units: **ug/L** Prep Date: **03/23/2015** Run No: **288167**
SampleType: **MBLK** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **204763** Analysis Date: **03/23/2015** Seq No: **6121637**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	BRL	0.50									
Acenaphthylene	BRL	1.0									
Anthracene	BRL	0.050									
Benz(a)anthracene	BRL	0.050									
Benzo(a)pyrene	BRL	0.050									
Benzo(b)fluoranthene	BRL	0.10									
Benzo(g,h,i)perylene	BRL	0.10									
Benzo(k)fluoranthene	BRL	0.050									
Chrysene	BRL	0.050									
Dibenz(a,h)anthracene	BRL	0.10									
Fluoranthene	0.02330	0.10									J
Fluorene	BRL	0.10									
Indeno(1,2,3-cd)pyrene	BRL	0.050									
Naphthalene	BRL	0.50									
Phenanthrene	0.02517	0.050									J
Pyrene	0.02320	0.050									J
Surr: 4-Terphenyl-d14	2.081	0	2.000		104	55.4	136				

Sample ID: **LCS-204763** Client ID: Units: **ug/L** Prep Date: **03/23/2015** Run No: **288167**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **204763** Analysis Date: **03/23/2015** Seq No: **6121638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.941	0.50	2.000		97.0	66.3	118				
Acenaphthylene	1.864	1.0	2.000		93.2	64	120				
Anthracene	2.081	0.050	2.000		104	64.6	127				
Benz(a)anthracene	1.926	0.050	2.000		96.3	60.6	137				
Benzo(a)pyrene	2.201	0.050	2.000		110	64	124				
Benzo(b)fluoranthene	2.092	0.10	2.000		105	56.4	133				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204763

Sample ID: **LCS-204763** Client ID: Units: **ug/L** Prep Date: **03/23/2015** Run No: **288167**
SampleType: **LCS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **204763** Analysis Date: **03/23/2015** Seq No: **6121638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzo(g,h,i)perylene	2.115	0.10	2.000		106	49.9	137				
Benzo(k)fluoranthene	2.127	0.050	2.000		106	61.7	137				
Chrysene	2.359	0.050	2.000		118	65.5	127				
Dibenz(a,h)anthracene	2.169	0.10	2.000		108	52.4	130				
Fluoranthene	2.151	0.10	2.000	0.02330	106	67	131				
Fluorene	1.896	0.10	2.000		94.8	68.3	120				
Indeno(1,2,3-cd)pyrene	2.195	0.050	2.000		110	50.4	139				
Naphthalene	1.886	0.50	2.000		94.3	61.1	120				
Phenanthrene	1.728	0.050	2.000	0.02517	85.1	68	119				
Pyrene	2.126	0.050	2.000	0.02320	105	62	127				
Surr: 4-Terphenyl-d14	2.128	0	2.000		106	55.4	136				

Sample ID: **1503F72-002DMS** Client ID: **TLC-001** Units: **ug/L** Prep Date: **03/23/2015** Run No: **288167**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **204763** Analysis Date: **03/23/2015** Seq No: **6122318**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.626	0.50	2.000		81.3	45.6	120				
Acenaphthylene	1.647	1.0	2.000		82.4	48.3	124				
Anthracene	1.707	0.050	2.000		85.4	57.7	124				
Benz(a)anthracene	1.873	0.050	2.000	0.02727	92.3	50.3	143				
Benzo(a)pyrene	1.731	0.050	2.000		86.5	44.2	127				
Benzo(b)fluoranthene	1.932	0.10	2.000	0.02960	95.1	48.4	125				
Benzo(g,h,i)perylene	1.851	0.10	2.000		92.5	40.2	122				
Benzo(k)fluoranthene	1.853	0.050	2.000	0.02803	91.3	45.5	122				
Chrysene	2.066	0.050	2.000	0.03150	102	46	124				
Dibenz(a,h)anthracene	2.003	0.10	2.000		100	40.1	128				
Fluoranthene	2.038	0.10	2.000	0.08395	97.7	58	127				
Fluorene	1.695	0.10	2.000		84.7	52.6	124				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204763

Sample ID: **1503F72-002DMS** Client ID: **TLC-001** Units: **ug/L** Prep Date: **03/23/2015** Run No: **288167**
SampleType: **MS** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **204763** Analysis Date: **03/23/2015** Seq No: **6122318**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Indeno(1,2,3-cd)pyrene	1.954	0.050	2.000		97.7	40.3	129				
Naphthalene	1.717	0.50	2.000		85.8	46.6	120				
Phenanthrene	1.676	0.050	2.000	0.05603	81.0	50.6	122				
Pyrene	1.909	0.050	2.000	0.05052	92.9	50.1	128				
Surr: 4-Terphenyl-d14	2.067	0	2.000		103	55.4	136				

Sample ID: **1503F72-002DMSD** Client ID: **TLC-001** Units: **ug/L** Prep Date: **03/23/2015** Run No: **288167**
SampleType: **MSD** TestCode: **SIM Polynuclear Aromatic Hydrocarbons SW8270D** BatchID: **204763** Analysis Date: **03/23/2015** Seq No: **6123669**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acenaphthene	1.662	0.50	2.000		83.1	45.6	120	1.626	2.15	29.4	
Acenaphthylene	1.665	1.0	2.000		83.3	48.3	124	1.647	1.09	32.5	
Anthracene	1.720	0.050	2.000		86.0	57.7	124	1.707	0.748	21.9	
Benz(a)anthracene	1.753	0.050	2.000	0.02727	86.3	50.3	143	1.873	6.66	26.8	
Benzo(a)pyrene	1.673	0.050	2.000		83.7	44.2	127	1.731	3.39	40.9	
Benzo(b)fluoranthene	1.801	0.10	2.000	0.02960	88.6	48.4	125	1.932	7.01	24.2	
Benzo(g,h,i)perylene	1.800	0.10	2.000		90.0	40.2	122	1.851	2.78	26.2	
Benzo(k)fluoranthene	1.764	0.050	2.000	0.02803	86.8	45.5	122	1.853	4.93	23.3	
Chrysene	2.039	0.050	2.000	0.03150	100	46	124	2.066	1.30	25	
Dibenz(a,h)anthracene	1.911	0.10	2.000		95.5	40.1	128	2.003	4.69	23.6	
Fluoranthene	1.983	0.10	2.000	0.08395	94.9	58	127	2.038	2.76	23.5	
Fluorene	1.701	0.10	2.000		85.1	52.6	124	1.695	0.394	31.5	
Indeno(1,2,3-cd)pyrene	1.877	0.050	2.000		93.9	40.3	129	1.954	4.00	28.8	
Naphthalene	1.571	0.50	2.000		78.6	46.6	120	1.717	8.84	22.9	
Phenanthrene	1.604	0.050	2.000	0.05603	77.4	50.6	122	1.676	4.40	20.2	
Pyrene	1.868	0.050	2.000	0.05052	90.8	50.1	128	1.909	2.19	24.7	
Surr: 4-Terphenyl-d14	1.884	0	2.000		94.2	55.4	136	2.067	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204877

Sample ID: **MB-204877**	Client ID:					Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288190**	
SampleType: **MBLK**	TestCode: **Cyanide SW9014**					BatchID: **204877**		Analysis Date: **03/23/2015**		Seq No: **6122131**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	BRL	0.010									

Sample ID: **LCS-204877**	Client ID:					Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288190**	
SampleType: **LCS**	TestCode: **Cyanide SW9014**					BatchID: **204877**		Analysis Date: **03/23/2015**		Seq No: **6122132**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2461	0.010	0.2500		98.4	85	115				

Sample ID: **1503F43-035DMS**	Client ID:					Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288190**	
SampleType: **MS**	TestCode: **Cyanide SW9014**					BatchID: **204877**		Analysis Date: **03/23/2015**		Seq No: **6122150**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2509	0.010	0.2500		100	70	130				

Sample ID: **1503F43-035DMSD**	Client ID:					Units: **mg/L**		Prep Date: **03/23/2015**		Run No: **288190**	
SampleType: **MSD**	TestCode: **Cyanide SW9014**					BatchID: **204877**		Analysis Date: **03/23/2015**		Seq No: **6122151**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyanide, Total	0.2506	0.010	0.2500		100	70	130	0.2509	0.120	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204878

Sample ID: **MB-204878** Client ID: Units: **ug/L** Prep Date: **03/20/2015** Run No: **288051**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **204878** Analysis Date: **03/20/2015** Seq No: **6119098**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetone	BRL	50									
Benzene	BRL	5.0									
Carbon disulfide	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Toluene	BRL	5.0									
Trichloroethene	BRL	5.0									
Surr: 4-Bromofluorobenzene	40.16	0	50.00		80.3	70.6	123				
Surr: Dibromofluoromethane	43.04	0	50.00		86.1	78.7	124				
Surr: Toluene-d8	47.03	0	50.00		94.1	81.3	120				

Sample ID: **LCS-204878** Client ID: Units: **ug/L** Prep Date: **03/20/2015** Run No: **288051**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **204878** Analysis Date: **03/20/2015** Seq No: **6119097**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.19	5.0	50.00		92.4	72.8	128				
Toluene	50.19	5.0	50.00		100	74.9	127				
Trichloroethene	47.83	5.0	50.00		95.7	70.5	134				
Surr: 4-Bromofluorobenzene	41.64	0	50.00		83.3	70.6	123				
Surr: Dibromofluoromethane	40.55	0	50.00		81.1	78.7	124				
Surr: Toluene-d8	45.76	0	50.00		91.5	81.3	120				

Sample ID: **1503G14-001AMS** Client ID: Units: **ug/L** Prep Date: **03/20/2015** Run No: **288216**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **204878** Analysis Date: **03/23/2015** Seq No: **6123252**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	483.3	50	500.0		96.7	70	135				
Toluene	501.9	50	500.0		100	70.5	137				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: 204878

Sample ID: **1503G14-001AMS** Client ID: Units: **ug/L** Prep Date: **03/20/2015** Run No: **288216**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **204878** Analysis Date: **03/23/2015** Seq No: **6123252**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Trichloroethene	515.1	50	500.0	12.52	101	71.8	139				
Surr: 4-Bromofluorobenzene	407.2	0	500.0		81.4	70.6	123				
Surr: Dibromofluoromethane	428.9	0	500.0		85.8	78.7	124				
Surr: Toluene-d8	450.0	0	500.0		90.0	81.3	120				

Sample ID: **1503G14-001AMSD** Client ID: Units: **ug/L** Prep Date: **03/20/2015** Run No: **288216**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **204878** Analysis Date: **03/23/2015** Seq No: **6123253**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	457.0	50	500.0		91.4	70	135	483.3	5.59	20	
Toluene	478.7	50	500.0		95.7	70.5	137	501.9	4.73	20	
Trichloroethene	493.1	50	500.0	12.52	96.1	71.8	139	515.1	4.36	20	
Surr: 4-Bromofluorobenzene	403.7	0	500.0		80.7	70.6	123	407.2	0	0	
Surr: Dibromofluoromethane	423.9	0	500.0		84.8	78.7	124	428.9	0	0	
Surr: Toluene-d8	445.4	0	500.0		89.1	81.3	120	450.0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. -Kennesaw
Project Name: AGL Augusta
Workorder: 1503F72

ANALYTICAL QC SUMMARY REPORT

BatchID: R288411

Sample ID: **MB-R288411**	Client ID:			Units: **mg/L**		Prep Date:		Run No: **288411**	
SampleType: **MBLK**	TestCode: **Hexavalent Chromium in Water SW7196A**			BatchID: **R288411**		Analysis Date: **03/25/2015**		Seq No: **6127686**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	BRL	0.0100									

Sample ID: **LCS-R288411**	Client ID:			Units: **mg/L**		Prep Date:		Run No: **288411**	
SampleType: **LCS**	TestCode: **Hexavalent Chromium in Water SW7196A**			BatchID: **R288411**		Analysis Date: **03/25/2015**		Seq No: **6127687**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4791	0.0100	0.5000		95.8	90	110				

Sample ID: **1503F72-003CMS**	Client ID: **TLC-002**			Units: **mg/L**		Prep Date:		Run No: **288411**	
SampleType: **MS**	TestCode: **Hexavalent Chromium in Water SW7196A**			BatchID: **R288411**		Analysis Date: **03/25/2015**		Seq No: **6127692**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4946	0.0100	0.5000	0.002200	98.5	85	115				H

Sample ID: **1503F72-003CMSD**	Client ID: **TLC-002**			Units: **mg/L**		Prep Date:		Run No: **288411**	
SampleType: **MSD**	TestCode: **Hexavalent Chromium in Water SW7196A**			BatchID: **R288411**		Analysis Date: **03/25/2015**		Seq No: **6127693**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.4940	0.0100	0.5000	0.002200	98.4	85	115	0.4946	0.121	20	H

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Appendix E Document List

September 15, 2014 City of Augusta Consent Letter

Northern Parcel (Parcel 047-3-225-00-0) Affidavit and Declaration of Restrictive Covenants and Notice

1. September 12, 1994 Affidavit Regarding O.C.G.A 12-B-97 signed by Atlanta Gas Light Company
2. May 23, 2001 Declaration of Restrictive Covenants and Notice by Atlanta Gas Light Company with Exhibit A
3. August 29, 2008 Declaration of Restrictive Covenants and Notice by Atlanta Gas Light Company with Exhibit A

Former Car Wash (Parcel 047-3-374-01-0) Affidavit and Declaration of Restrictive Covenants and Notice

1. May 28, 2009 Affidavit Under Hazardous Site Response Act signed by Atlanta Gas Light Company with Exhibit A
2. July 21, 2008 Declaration of Restrictive Covenants and Notice by Atlanta Gas Light Company with Exhibit A

Georgia Power Vault Area Affidavit

1. August 13, 2009 Affidavit Under Hazardous Site Response Act signed by representative of Augusta, GA (mayor) with Exhibit A

Parcel 046-2-098-00-0 Affidavit

1. July 23, 2009 Affidavit Under Hazardous Site Response Act signed by representative of The Summit Works, LLLP with Exhibit A

Parcel 046-4-476-00-0 Affidavits

1. August 12, 1998 Affidavit Under Hazardous Site Response Act Re: 732 Ninth St, signed by Atlanta Gas Light Company with Exhibit A
2. August 12, 1998 Affidavit Under Hazardous Site Response Act Re: 724 Ninth St, signed by Atlanta Gas Light Company with Exhibit A
3. August 12, 1998 Affidavit Under Hazardous Site Response Act Re: 722 Ninth St, signed by Atlanta Gas Light Company with Exhibit A
4. August 12, 1998 Affidavit Under Hazardous Site Response Act Re: 706 Ninth St, signed by Atlanta Gas Light Company with Exhibit A
5. August 12, 1998 Affidavit Under Hazardous Site Response Act Re: 837 Walton Way, signed by Atlanta Gas Light Company with Exhibit A

Parcel 046-4-764-00-0 Declaration of Restrictive Covenants and Notice

1. May 23, 2001 Declaration of Restrictive Covenants and Notice, by Atlanta Gas Light Company with Exhibit A

Parcel 047-3-340-00-0 and Portion of parcel 047-3-341-00-0 Declaration of Restrictive Covenants and Easement

1. April 30, 2001 Declaration of Restrictions, Covenants and Easement by Robert Washington with Exhibit A

Portion of Fenwick St, Portion of King St: Declarations of Restrictions and Covenants

1. May 25, 2001 Declaration of Restrictions and Covenants by Augusta, GA with Exhibit A

Portion of Walton Way, Portion of 8th St, Portion of Taylor St: Declaration of Restrictions and Covenants

1. May 25, 2001 Declaration of Restrictions and Covenants by Augusta, GA with Exhibit A

Parcel 046-2-053-01-0 Affidavit

1. December 15, 2009 Affidavit Under Hazardous Site Response Act signed by a representative of County Board of Education of Richmond County with Exhibit A

Parcel 047-3-362-00-0 Correspondence

1. August 12, 2010 Affidavit Under Hazardous Site Response Act signed by representative of Augusta, GA with Exhibit A
2. June 15, 2004 Quit-Claim Deed-indenture between the State of Georgia and August, Georgia with Exhibit A (legal description and proposed acquisition by the State of Georgia)

Augusta
GEORGIA

OFFICE OF THE MAYOR

DEKE COPENHAVER
MAYOR

Mr. Jeff Cown
Branch Chief, Land Protection Division
Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Drive
Suite 1054, East Floyd Tower
Atlanta, GA 30334

Re: ***Atlanta Gas Light Company***
Former Augusta MGP Site

Dear Mr. Cown:

This letter is to inform the Georgia Environmental Protection Division (EPD) that the Consolidated Government of Augusta, Georgia ("City") authorizes Atlanta Gas Light Company to enter a portion of several City Streets, as more particularly described on the attachment (the "City Property"), into the Georgia Voluntary Remediation Program. The City consents to and authorizes Atlanta Gas Light Company to perform all corrective actions on the City Property, including In-situ Solidification, as described in the Voluntary Investigation and Remediation Plan, to which this letter is included. The City further agrees to execute a covenant restricting the use of groundwater underneath the City Property in conformance with Chapter 16 of Title 44, "Uniform Environmental Covenants Act."

Should EPD have any questions, please contact Interim Administrator, Tameka Allen at 706-821-2400 or allen@augustaga.gov.

Mayor, Deke Copenhaver

9/15/14
Date

AGM
9/15/14

C: Tameka Allen, Interim Administrator
Abie Ladson, Director of Engineering
Tom Wiedmeier, Director of Utilities
Greg Corbett, Atlanta Gas Light Company
Carol R. Geiger, Kazmarek Mowrey Cloud Laseter LLP

Northern Parcel
(Parcel 047-3-225-00-0)

Instrument Number: 1994037842 Book/Page: 00470/1089 Date Filed: 09/14/1994 15:52:00

#1

REALTY
REEL# 470

RETURN TO:
Lawrence C. Bradbury
Environmental Services-1313
Atlanta Gas Light Company
P.O. Box 4569
Atlanta, Georgia 30302

STATE OF GEORGIA

REEL 470 PAGE 1089

COUNTY OF RICHMOND

AFFIDAVIT REGARDING O.C.G.A. 12-8-97(c)

Personally appeared before me, Lawrence C. Bradbury, authorized agent of Atlanta Gas Light Company, who being duly sworn according to law, deposes and says on oath as follows:

(1) That Atlanta Gas Light Company is the fee simple owner of all that tract or parcel(s) of land situated in Richmond County, Georgia, as being more fully described in Realty Book 14-G, page(s) 239-240, Realty Book 15-J, page(s) 174-176, and Realty Book 15-N, page(s) 238-239, in the office of the Clerk of the Superior Court of Richmond County, Georgia.

(2) That the above mentioned properties have been designated on the Hazardous Site Inventory (HSI) as needing corrective action pursuant to Rule 391-3-19-.06(6) of the Georgia Rules for Hazardous Site Response.

(3) That in accordance with Rule 391-3-19-.08(2), Deponent gives notice:

"This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act."

Atlanta Gas Light Company

Lawrence C. Bradbury
Manager, Engineering
Environmental Services

ORIGINAL REEL RECORDED
REEL 470 PAGE 1089
AM 10: 197888
14 PM 3:52

Sworn to and subscribed before me
this 12th day of September.

Brenda P. Vandiver
NOTARY PUBLIC

My commission expires Notary Public, Newton County, Georgia
My Commission Expires August 24, 1997

GA, RICHMOND COUNTY CLERK SUPERIOR COURT
FILED FOR RECORD 14 SEP 1994 AT 03:52PM
RECORDED 14 SEP 1994

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:13:27

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 2001015532 Book/Page: 00731/1403 Date Filed: 05/29/2001 15:29:58.03

Book 00731:1403 Augusta - Richmond County
2001015532 05/29/2001 15:29:58.03
$18.00 DECLARATION RESTRICTIVE COVENA
2001015532 Augusta - Richmond County

#54

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:07

Elaine C. Johnson, Richmond County Clerk of Superior Court

AFTER RECORDING RETURN TO:
Carol Geiger
Kilpatrick Stockton LLP
1100 Peachtree Street, Suite 2800
Atlanta, Georgia 30309-4530

DECLARATION OF RESTRICTIVE COVENANTS AND NOTICE

THIS DECLARATION is made this 23rd day of May 2001, by **ATLANTA GAS LIGHT COMPANY** a Georgia Corporation (hereinafter referred to as "Declarant").

WITNESSETH:

WHEREAS, Declarant owns the property described on Exhibit "A" hereto attached and made a part hereof (the "Property"); and

WHEREAS, the Property contains "hazardous substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*, and, accordingly, Declarant desires to restrict the use of the Property as provided herein.

NOW, THEREFORE, Declarant does hereby subject the Property to the covenants, restrictions, easements and rights hereinafter stated:

1. Definitions. For purposes of this Declaration, the following terms shall have the following meanings, unless the context requires otherwise:

This document is not to scale.

Book 00731:1404 Augusta - Richmond County
2001015532 05/29/2001 15:29:58.03

"AGLC" shall mean Atlanta Gas Light Company, a Georgia corporation, its successors and assigns.

"Director" shall mean the Director of EPD, as hereinafter defined.

"EPD" shall mean the Georgia Department of Natural Resources, Environmental Protection Division, as well as any successor state agency with responsibility for and jurisdiction over environmental matters.

"Hazardous Substances" shall have the same meaning as under HSRA, as hereinafter defined.

"HSRA" shall mean the Hazardous Site Response Act, O.C.G.A. § 12-8-90, *et seq.*

2. Restrictive Covenants. Declarant hereby:

a. prohibits the use of groundwater beneath the Property as a source of drinking water or for any other purpose that could result in human ingestion as defined in the Rules for HSRA, Rule 391-3-19-.02(2)(i), incorporated herein by reference, in effect at the time of this Declaration;

b. restricts the use of the Property to non-residential uses as defined in the Rules for HSRA in effect at the time of this Declaration;

c. prohibits the disturbance of any material stabilized in accordance with the Corrective Action Plan submitted on March 27, 2001 and all modifications submitted thereafter, without prior notice to and approval from EPD; and

d. agrees to install and maintain permanent markers on each side of the Property that delineate the restricted area and prohibits the disturbance or removal of such markers.

This Declaration is made in accordance with Ga. Comp. R. & Regs. 391-3-19-.08(7), which expressly authorizes the use of restrictive covenants to prohibit activities on the Property that may substantially interfere with a remedial action, operation and maintenance, long-term monitoring, or other measures to ensure the integrity of any remedial action. The foregoing are hereinafter collectively referred to as the "Restrictive Covenants".

3. Improvements. Any and all improvements located in whole or in part on all or any portion of the Property, and the construction, operation, use and maintenance of the Property and such improvements, shall be subject to and shall comply with the Restrictive Covenants.

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:09

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 2001015532 Book/Page: 00731/1405 Date Filed: 05/29/2001 15:29:58.03

Book 00731:1405 Augusta - Richmond County
2001015532 05/29/2001 15:29:58.03

4. Covenants running with the land. Declarant acknowledges and agrees that the Restrictive Covenants are appurtenant to and run with the land, and shall be binding and enforceable against all future owners of the Property including Declarant, its successors and assigns, and any trustee appointed to manage the Property. Should a transfer or sale of the Property occur before such time as the Restrictive Covenants have been amended or revoked then said Restrictive Covenants shall be binding on the transferee(s) or purchaser(s).

The Restrictive Covenants shall inure to the benefit of EPD, AGLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns and AGLC or its successors and assigns in a court of competent jurisdiction. The Restrictive Covenants shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60(c), unless and until the Director determines that the Property meets Type 1 or 2 Risk Reduction Standards, as defined in the Rules for Hazardous Site Response Chapter 391-3-19-.07.

5. Severability. In the event that any of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect in a final ruling or judgment of a court of competent jurisdiction from which no appeal has been or can be taken, the remainder of the Restrictive Covenants shall not be affected thereby and each term, covenant, condition and provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

6. Statutory Notice. This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act. This Declaration is a condition of approval for the Corrective Action Plan submitted to EPD on March 27, 2001 and all modifications submitted thereafter for the Property and is a requirement under Consent Order EPD-HW-1390 entered into by AGLC on July 11, 2000.

7. General Provisions.

(a) Headings. The use of headings, captions and numbers in this Declaration is solely for the convenience of identifying and indexing the various provisions in this Declaration and shall in no event be considered otherwise in construing or interpreting any provision in this Declaration.

(b) Non-Waiver. Failure by any party to complain of any action, non-action or breach of any other party shall not constitute a waiver of any aggrieved party's rights hereunder. Waiver by any party of any right arising from any breach of any other party

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:10

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Book 00731:1406 Augusta - Richmond County
2001015532 05/29/2001 15:29:58.03

shall not constitute a waiver of any other right arising from a subsequent breach of the same obligation or for any other default, past, present or future.

(c) Time of Essence. Time is of the essence of this Declaration.

(d) Applicable Law. This Declaration shall be governed by, construed under and interpreted and enforced in accordance with the laws of the State of Georgia.

IN WITNESS WHEREOF, Declarant has signed and sealed this Declaration, all the day, month, and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

(NOTARY SEAL)

My Commission Expires:
Notary Public, Rockdale County, Georgia
My Commission Expires March 17, 2002

DECLARANT:
ATLANTA GAS LIGHT COMPANY,
a Georgia Corporation

By:
Paul R. Shlanta
Senior Vice-President

(CORPORATE SEAL)

ATLLIB01 1163877.1

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:11

Elaine C. Johnson, Richmond County Clerk of Superior Court

Instrument Number: 2001015532 Book/Page: 00731/1407 Date Filed: 05/29/2001 15:29:58.03

Book 00731:1407 Augusta - Richmond County
2001015532 05/29/2001 15:29:58.03

EXHIBIT A

All of the following described property, situate, lying and being in the City of Augusta, in the County of Richmond, in the State of Georgia, and more particularly described as follows:

That certain lot, piece or parcel of land in the City of Augusta situate and being on the southwest corner of Calhoun and Jackson Streets, triangular in shape, fronting on Jackson Street on the east four hundred and thirty-three (433) feet; fronting on Calhoun Street on the north three hundred and sixty-seven (367) feet; and bounded on the southwest by the third level of the Augusta canal.

Filed in this office:
Augusta - Richmond County
05/29/2001 15:29:58.03
Elaine C. Johnson

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:12

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Book 01189:2515 Augusta - Richmond County
2008040266 09/03/2008 12:09:07.00
$18.00 DECLARATION RESTRICTIVE COVENA
2008040266 Augusta - Richmond County

RETURN TO;

J. Noel Schweers III, P.C.
Post Office Box 31390
Augusta, Georgia 30903-1390

DECLARATION OF RESTRICTIVE COVENANTS AND NOTICE

THIS DECLARATION is made this 29th day of August, 2008, by **ATLANTA GAS LIGHT COMPANY** a Georgia Corporation (hereinafter referred to as "Declarant").

WITNESSETH:

WHEREAS, Declarant owns the property described on Exhibit "A" hereto attached and made a part hereof (the "Property"); and

WHEREAS, the Property contains "hazardous substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*, and, accordingly, Declarant desires to restrict the use of the Property as provided herein.

NOW, THEREFORE, Declarant does hereby subject the Property to the covenants, restrictions, easements and rights hereinafter stated:

1. Definitions. For purposes of this Declaration, the following terms shall have the following meanings, unless the context requires otherwise:

"AGLC" shall mean Atlanta Gas Light Company, a Georgia corporation, its successors and assigns.

"Director" shall mean the Director of EPD, as hereinafter defined.

"EPD" shall mean the Georgia Department of Natural Resources, Environmental Protection Division, as well as any successor state agency with responsibility for and jurisdiction over environmental matters.

"Hazardous Substances" shall have the same meaning as under HSRA, as hereinafter defined.

"HSRA" shall mean the Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*

2. Restrictive Covenants. Declarant hereby:

(a) prohibits the use or extraction of groundwater beneath the Property as a source of drinking water or for any other purpose that could result in human contact with the groundwater;

(b) restricts the use of the Property to non-residential uses as defined in the Rules for HSRA in effect at the time of this Declaration;

(c) prohibits excavation, construction, and similar activities in soil at or below two feet below land surface except in accordance with an appropriate health and safety plan sufficient to protect the health and safety of persons who may contact the soil and sufficient to assure that all excavated soil is handled in accordance with applicable laws and regulations; and

(d) agrees to install and maintain permanent markers on each side of the Property that delineate the restricted area and prohibits the disturbance or removal of such markers.

This Declaration is made in accordance with Ga. Comp. R. & Regs. 391-3-19-.08(7), which expressly authorizes the use of restrictive covenants to prohibit activities on property that may substantially interfere with a remedial action, operation and maintenance, long-term monitoring, or other measures to ensure the integrity of any remedial action. The foregoing are hereinafter collectively referred to as the "Restrictive Covenants".

3. Improvements. Any and all improvements located in whole or in part on all or any portion of the Property, and the construction, operation, use and maintenance of the Property and such improvements, shall be subject to and shall comply with the Restrictive Covenants.

4. Covenants running with the land. Declarant acknowledges and agrees that the Restrictive Covenants are appurtenant to and run with the land, and shall be binding and enforceable against all future owners of the Property including Declarant, its successors and assigns, and any trustee appointed to manage the Property. Should a transfer or sale of the Property occur before such time as the Restrictive Covenants have been amended or revoked then said Restrictive Covenants shall be binding on the transferee(s) or purchaser(s).

The Restrictive Covenants shall inure to the benefit of EPD, AGLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns and AGLC or its successors and assigns in a court of competent jurisdiction. The Restrictive Covenants shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60(c), unless and until the Director determines that the Property meets Type 1 or 2 Risk Reduction Standards, as defined in the Rules for Hazardous Site Response Chapter 391-3-19-.07.

5. Severability. In the event that any of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect in a final ruling or judgment of a court of competent jurisdiction from which no appeal has been or can be taken, the remainder of the Restrictive Covenants shall not be affected thereby and each

term, covenant, condition and provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

6. Statutory Notice. The Property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. This Property is classified as a Type 5 RRS. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

7. General Provisions.

(a) Headings. The use of headings, captions and numbers in this Declaration is solely for the convenience of identifying and indexing the various provisions in this Declaration and shall in no event be considered otherwise in construing or interpreting any provision in this Declaration.

(b) Non-Waiver. Failure by any party to complain of any action, non-action or breach of any other party shall not constitute a waiver of any aggrieved party's rights hereunder. Waiver by any party of any right arising from any breach of any other party shall not constitute a waiver of any other right arising from a subsequent breach of the same obligation or for any other default, past, present or future.

(c) Time of Essence. Time is of the essence of this Declaration.

(d) Applicable Law. This Declaration shall be governed by, construed under and interpreted and enforced in accordance with the laws of the State of Georgia.

8. Existing Covenants. This Declaration of Restrictive Covenant supersedes and replaces those certain Declaration of Restrictive Covenants filed in (i) Book 00731:1403-1407, and (ii) Book 01056:1219-1222.

IN WITNESS WHEREOF, Declarant has signed and sealed this Declaration, all the day, month, and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

(NOTARY SEAL)

DECLARANT:
ATLANTA GAS LIGHT COMPANY,
a Georgia Corporation

By:

Name: Jeffrey P. Brown

Title: VP & Assoc General Counsel

My Commission Expires:
Notary Public, DeKalb County, Georgia
My Commission Expires Nov. 12, 2009

(CORPORATE SEAL)

Book 01189:2519 Augusta - Richmond County
2008040266 09/03/2008 12:09:07.00

EXHIBIT A

All of the following described property situate, lying and being in the City of Augusta, in the County of Richmond, in the State of Georgia, and more particularly described as follows:

That certain lot, piece of parcel of land in the City of Augusta and being on the southwest corner of Calhoun Street (now known as Walton Way) and Jackson Street (also known as 8th Street), triangular in shape, fronting on Jackson Street (8th Street) on the east four hundred and thirty-three (433) feet; fronting on Calhoun Street (Walton Way) on the north three hundred and sixty-seven (367) feet; and bounded on the southwest side by the third level of the Augusta canal.

Augusta-Richmond County Tax Parcel Number: 047-3-225-00-0

Filed in this office:
Augusta - Richmond County
09/03/2008 12:09:07.00
Elaine C Johnson
Clerk of Superior Court

Former Car Wash
(Parcel 047-3-374-01-0)

Book 01218:0345 Augusta - Richmond County
2009024071 05/28/2009 11:14:28.00
$16.00 AFFIDAVIT
2009024071 Augusta - Richmond County

Return to: J. Noel Schweers III, P.C.
Post Office Box 31390
Augusta, Georgia 30903-1390

Cross Reference: Deed Book 795, page 1345

Please Return To: Carol R. Geiger
Kazmarek Geiger & Laseter LLP
One Securities Center
3490 Piedmont Rd. NE, Suite 201
Atlanta, Georgia 30305

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of Atlanta Gas Light Company, deposes and says on oath as follows:

(1) That Atlanta Gas Light Company is the fee simple owner of all that tract or parcel of land situated in Richmond County, Georgia, as being more fully described on Exhibit "A" attached hereto (the "Property").

2) That the Property has been designated on the Hazardous Site Inventory as HSI Site No. 10132 as needing corrective action pursuant to Rule 391-3-19.06(6) of the Georgia Rules for Hazardous Site Response.

(3) That in accordance with Rule 391-3-19-.08(2), Deponent gives notice:

> "This property has been listed on that state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning the property. This notice is provided in compliance with the Georgia Hazardous Site Response Act."

Exhibit "A"

All that lot, tract or parcel of land, situate, lying and being in Augusta, Richmond County, Georgia and being shown and designated as "0.87 Ac." on that certain ALTA/ACSM Land Title Survey, dated May 29, 2002 prepared by H. Lawson Graham & Associates, Inc. for Atlanta Gas Light Company, recorded in Realty Reel 795, pages 1343-1344, and in Plat Cabinet C, Slide 27, Plat E, in the Office of the Clerk of the Superior Court for Richmond County, Georgia. Reference is hereby made to said plat for a more complete description of the Property.

This being the same property conveyed to Atlanta Gas Light Company by Warranty Deed, dated June 18, 2002, recorded in Book 795, page 1345, in said Clerk's Office.

Tax Map Parcel Number: 047-3-374-01-0

Book 01185:1108 Augusta - Richmond County
2008033612 07/23/2008 10:18:12.00
$18.00 DECLARATION RESTRICTIVE COVENA
2008033612 Augusta - Richmond County

#58

Return to: J. Noel Schweers III, P.C.
Post Office Box 31390
Augusta, Georgia 30903-1390

AFTER RECORDING RETURN TO:
Carol R. Geiger
Kazmarek Geiger & Laseter, LLP
One Securities Center, Suite 201
Atlanta, Georgia 30305

DECLARATION OF RESTRICTIVE COVENANTS AND NOTICE

THIS DECLARATION is made this 21st day of July, 2008, by ATLANTA GAS LIGHT COMPANY a Georgia Corporation (hereinafter referred to as "Declarant").

WITNESSETH:

WHEREAS, Declarant owns the property described on Exhibit "A" hereto attached and made a part hereof (the "Property"); and

WHEREAS, the Property contains "hazardous substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*, and, accordingly, Declarant desires to restrict the use of the Property as provided herein.

NOW, THEREFORE, Declarant does hereby subject the Property to the covenants, restrictions, easements and rights hereinafter stated:

1. Definitions. For purposes of this Declaration, the following terms shall have the following meanings, unless the context requires otherwise:

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:42

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Book 01185:1109 Augusta-Richmond County
2008033612 07/23/2008 10:18:12.00

"AGLC" shall mean Atlanta Gas Light Company, a Georgia corporation, its successors and assigns.

"Director" shall mean the Director of EPD, as hereinafter defined.

"EPD" shall mean the Georgia Department of Natural Resources, Environmental Protection Division, as well as any successor state agency with responsibility for and jurisdiction over environmental matters.

"Hazardous Substances" shall have the same meaning as under HSRA, as hereinafter defined.

"HSRA" shall mean the Hazardous Site Response Act, O.C.G.A. § 12-8-90, *et seq.*

2. Restrictive Covenants. Declarant hereby:

(a) prohibits the use or extraction of groundwater beneath the Property as a source of drinking water or for any other purpose that could result in human contact with the groundwater;

(b) restricts the use of the Property to non-residential uses as defined in the Rules for HSRA in effect at the time of this Declaration;

(c) prohibits excavation, construction, and similar activities in soil at or below two feet below land surface in the areas depicted on Exhibit "B" except in accordance with an appropriate health and safety plan sufficient to protect the health and safety of persons who may contact the soil and sufficient to assure that all excavated soil is handled in accordance with applicable laws and regulations; and

(d) agrees to install and maintain permanent markers on each side of the Property that delineate the restricted area and prohibits the disturbance or removal of such markers.

This Declaration is made in accordance with Ga. Comp. R. & Regs. 391-3-19-.08(7), which expressly authorizes the use of restrictive covenants to prohibit activities on property that may substantially interfere with a remedial action, operation and maintenance, long-term monitoring, or other measures to ensure the integrity of any remedial action. The foregoing are hereinafter collectively referred to as the "Restrictive Covenants".

3. Improvements. Any and all improvements located in whole or in part on all or any portion of the Property, and the construction, operation, use and maintenance of the Property and such improvements, shall be subject to and shall comply with the Restrictive Covenants.

4. Covenants running with the land. Declarant acknowledges and agrees that the Restrictive Covenants are appurtenant to and run with the land, and shall be binding and enforceable against all future owners of the Property including Declarant, its

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:43

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

successors and assigns, and any trustee appointed to manage the Property. Should a transfer or sale of the Property occur before such time as the Restrictive Covenants have been amended or revoked then said Restrictive Covenants shall be binding on the transferee(s) or purchaser(s).

The Restrictive Covenants shall inure to the benefit of EPD, AGLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns and AGLC or its successors and assigns in a court of competent jurisdiction. The Restrictive Covenants shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60(c), unless and until the Director determines that the Property meets Type 1 or 2 Risk Reduction Standards, as defined in the Rules for Hazardous Site Response Chapter 391-3-19-.07.

5. Severability. In the event that any of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect in a final ruling or judgment of a court of competent jurisdiction from which no appeal has been or can be taken, the remainder of the Restrictive Covenants shall not be affected thereby and each term, covenant, condition and provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

6. Statutory Notice. The Property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

7. General Provisions.

(a) Headings. The use of headings, captions and numbers in this Declaration is solely for the convenience of identifying and indexing the various provisions in this Declaration and shall in no event be considered otherwise in construing or interpreting any provision in this Declaration.

(b) Non-Waiver. Failure by any party to complain of any action, non-action or breach of any other party shall not constitute a waiver of any aggrieved party's rights hereunder. Waiver by any party of any right arising from any breach of any other party shall not constitute a waiver of any other right arising from a subsequent breach of the same obligation or for any other default, past, present or future.

(c) Time of Essence. Time is of the essence of this Declaration.

(d) Applicable Law. This Declaration shall be governed by, construed under and interpreted and enforced in accordance with the laws of the State of Georgia.

IN WITNESS WHEREOF, Declarant has signed and sealed this Declaration, all the day, month, and year first above written.

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:45

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Book 01185:1111 Augusta-Richmond County
2008033612 07/23/2008 10:18:12.00

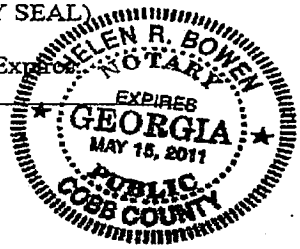
Signed, sealed and delivered
in the presence of:

Carolyn Painter
Unofficial Witness

Helen R Bowen
Notary Public

(NOTARY SEAL)

My Commission Expires:



DECLARANT:
ATLANTA GAS LIGHT COMPANY,
a Georgia Corporation

By: Suzanne Sitherwood

Name: Suzanne Sitherwood

Title: President

(CORPORATE SEAL)

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:44

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 2008033612 Book/Page: 01185/1112 Date Filed: 07/23/2008 10:18:12.00

Book 01185:1112 Augusta-Richmond County
2008033612 07/23/2008 10:18:12.00

Exhibit "A"

All that lot, tract or parcel of land, situate, lying and being in Augusta, Richmond County, Georgia and being shown and designated as "0.87 Ac." on that certain ALTA/ACSM Land Title Survey dated June 11, 2002 prepared by H. Lawson Graham & Associates, Inc. for Atlanta Gas Light Company, a copy of which is recorded in Realty Reel 795, pages 1343-1344, and in Plat Cabinet C, Slide 27, Plat E, in the Office of the Clerk of the Superior Court for Richmond County, Georgia. Reference is hereby made to said plat for a more complete description of the Property.

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:47

Elaine C. Johnson, Richmond County Clerk of Superior Court

Filed in this office:
Augusta-Richmond County
07/23/2008 10:18:12.00
Elaine C Johnson
Clerk of Superior Court

This document is not to scale.

Georgia Power Vault Area

Book 01227:2007 Augusta - Richmond County
2009034001 08/13/2009 09:54:44.00
$14.00 AFFIDAVIT
2009034001 Augusta - Richmond County

Please Return To: Carol R. Geiger
Kazmarek Geiger & Laseter LLP
One Securities Center
3490 Piedmont Rd. NE, Suite 201
Atlanta, Georgia 30305

Return to: J. Noel Schweers III, P.C.
Post Office Box 31390
Augusta, Georgia 30903-1390

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of Augusta, Georgia, deposes and says on oath as follows:

(1) That Augusta, Georgia is the fee simple owner of all that tract or parcel of land situated in Richmond County, Georgia, as being more fully described on Exhibit "A" attached hereto (the "Property").

(2) That the Property has been designated on the Hazardous Site Inventory as HSI Site No. 10132 as needing corrective action pursuant to Rule 391-3-19.06(6) of the Georgia Rules for Hazardous Site Response.

(3) That in accordance with Rule 391-3-19-.08(2), Deponent gives notice:

> "This property has been listed on that state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning the property. This notice is provided in compliance with the Georgia Hazardous Site Response Act."

Book 01227:2008 Augusta - Richmond County
2009034001 08/13/2009 09:54:44.00

IN WITNESS WHEREOF, that this Affidavit has been duly executed by an authorized representative of Augusta, Georgia this 12th day of August, 2009.

Signed, sealed and delivered in our presence in Richmond County, State of Georgia

AUGUSTA, GEORGIA

Witness

By: _____
Deke S. Copenhaver
As its Mayor

Notary Public, County of Columbia
State of Georgia
My Commission Expires: Notary Public, Columbia County, Georgia
My Commission Expires July 27, 2010
(SEAL)

Attest: _____
Lena J. Bonner
As it Clerk of Commission

(CITY SEAL)

Book 01227:2009 Augusta - Richmond County
2009034001 08/13/2009 09:54:44.00

Exhibit "A"

Property of Augusta, Georgia
Georgia Power Vault area in James Brown Boulevard and Fenwick Street

The area of impact is approximately 7 to 16 feet beneath the street and within a localized area surrounding a Georgia Power electrical vault. The Georgia Power vault is located at the southeast corner of the intersection of James Brown Boulevard (a/k/a 9th Street) and Fenwick Street.

Filed in this office:
Augusta - Richmond County
08/13/2009 09:54:44.00
ELAINE C. JOHNSON
Clerk of Superior Court

Parcel 046-2-098-00-0

Book 01225:0833 Augusta - Richmond County
2009031932 07/23/2009 12:14:41.00
$14.00 AFFIDAVIT
2009031932 Augusta - Richmond County

Return to: **J. Noel Schweers III, P.C.**
Post Office Box 31390
Augusta, Georgia 30903-1390

Cross Reference: Deed Book 1063, page 1399

Please Return To: Carol R. Geiger
Kazmarek Geiger & Laseter LLP
One Securities Center
3490 Piedmont Rd. NE, Suite 201
Atlanta, Georgia 30305

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of The Summit Works, LLLP, deposes and says on oath as follows:

(1) That The Summit Works, LLLP is the fee simple owner of all that tract or parcel of land situated in Richmond County, Georgia, as being more fully described on Exhibit "A" attached hereto (the "Property").

(2) That the Property has been designated on the Hazardous Site Inventory as HSI Site No. 10132 as needing corrective action pursuant to Rule 391-3-19.06(6) of the Georgia Rules for Hazardous Site Response.

(3) That in accordance with Rule 391-3-19-.08(2), Deponent gives notice:

> "This property has been listed on that state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning the property. This notice is provided in compliance with the Georgia Hazardous Site Response Act."

Book 01225:0834 Augusta-Richmond County
2009031932 07/23/2009 12:14:41.00

IN WITNESS WHEREOF, that The Summit Works, LLLP has executed this Affidavit this 21 day of July, 2009.

Signed, sealed and delivered in our presence in Richmond County, State of Georgia

Witness

The Summit Works, LLLP

By: _____
Braye C. Boardman
As its General Partner

Notary Public, County of Richmond
State of Georgia
My Commission Expires: Notary Public, Richmond County, Georgia My Commission Expires May 12, 2012
(SEAL)

Stephani D. McGhee Notary Public Richmond County, GA

Book 01225:0835 Augusta-Richmond County
2009031932 07/23/2009 12:14:41.00

Exhibit "A"

All that parcel, piece or lot of land, together with improvements thereon, situate, lying and being in the State of Georgia, County of Richmond and City of Augusta, fronting 163.27' on the southern side of Walker Street, containing 0.78 acre and being more particularly shown on a certain plat thereof prepared for Summit Works, LLLP by Cranston, Robertson & Whitehurst, P.C., dated June 15, 2006, recorded in Plat Book 2, page 383, in the Office of the Clerk of Superior Court for Richmond County, Georgia; reference being made to said plat for a more particular description thereof.

The property is known as 940 Walker Street under the present system of house numbering in effect in the City of Augusta, Georgia.

This being the same property conveyed to The Summit Works, LLLP from Felipe A. Mata, by Warranty Deed, dated June 28, 2006, recorded in Book 1063, page 1399, in said Clerk's Office.

Tax Map Parcel Number: 046-2-098-00-0

Filed in this office:
Augusta-Richmond County
07/23/2009 12:14:41.00
ELAINE C. JOHNSON
Clerk of Superior Court

Parcel 046-4-476-00-0

Instrument Number: 1998034715 Book/Page: 00613/0426 Date Filed: 09/28/1998 10:30:00

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:26

Elaine C. Johnson, Richmond County Clerk of Superior Court

17

(14)

FILED IN THIS OFFICE
RICHMOND COUNTY
98 SEP 28 AM 10:30
ELAINE C. JOHNSON
CLERK OF SUPERIOR COURT

REEL 613 PAGE 426

ORIGINAL REEL RECORDED
REEL 613 PAGE 426
NIP ID: 372825

After recording, please return to:
Kara M. Hunter
Atlanta Gas Light Company
P.O. Box 4569
Atlanta, Georgia 30302

RE: 738 Ninth Street
See Exhibit "A" for a more complete description

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of the Atlanta Gas Light Company, owner of the property referenced above, and further that:

This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

IN WITNESS WHEREOF, the undersigned hereto has executed and sealed this affidavit, all as of the day and year of first written below.

Signed, sealed and delivered in the presence of:

Janet Mink
Unofficial Witness

Allyson Mooney
Notary Public
My Commission expires:
Notary Public, Walton County, Georgia
My Commission Expires Jan. 8, 2001

(NOTARIAL SEAL)

By: M. D. Hutchins (SEAL)
MICHAEL D. HUTCHINS
Vice President, Operations and Engineering

Date of Execution: August 12, 1998

This document is not to scale.

Instrument Number: 1998034715 Book/Page: 00613/0427 Date Filed: 09/28/1998 10:30:00

EXHIBIT "A"

730 Ninth Street, 732 Ninth Street,
724 Ninth Street, 722 Ninth Street,
706 Ninth Street, and 837 Walton Way

ALL that tract or parcel of land, with improvements thereon, situate, lying and being in the City of Augusta, Richmond County, Georgia, located on the northeast corner of the intersection of Walton Way (formerly Calhoun Street) and Campbell (Ninth) Street, containing 0.73 acres, more or less, being triangular in shape, having a frontage of 177.21 feet on the north side of Walton Way and extending back along the east side of the right-of-way of Campbell (Ninth) Street for a distance of 305.02 feet on its western boundary, its northeastern boundary being 355.10 feet in length and extends along the western boundary of the right-of-way of the third level of the Augusta Canal. The property herein described includes all of the property lying between Campbell (Ninth) Street; Walton (formerly Calhoun Street); and the western boundary of the right-of-way of the third level of the Augusta Canal. Said property is shown and designated as "Tract 'A' 0.73 A.C." on a previously unrecorded plat dated December 4, 1984, prepared by Baldwin & Cranston Associates, Inc., for First Railroad and Banking Company, and copy of which is recorded in said Clerk's Office.

BEING the same property conveyed to Donna E. Cheeks and Deborah E. Cheeks by Warranty Deed of First Railroad & Banking Company of Georgia dated December 30, 1986, and recorded in Realty Reel 248, page 2425, in said Clerk's Office.

SAID property is known as 706 Ninth Street, 722 Ninth Street, 724 Ninth Street, 730 Ninth Street, 732 Ninth Street and 837 Walton Way according to the system of street numbering currently in use by the City of Augusta, Richmond County, Georgia.

GA, RICHMOND COUNTY CLERK SUPERIOR COURT
FILED FOR RECORD 28 SEP 1998 AT 10:30AM
RECORDED 28 SEP 1998

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:27

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 1998034716 Book/Page: 00613/0428 Date Filed: 09/28/1998 10:31:00

#18

REEL 613 PAGE 428 (15)

FILED IN THIS OFFICE
RICHMOND COUNTY
98 SEP 28 AM 10:31
ELAINE C. JOHNSON
CLERK OF SUPERIOR COURT

ORIGINAL REEL RECORDED
REEL 613 PAGE 428
WIP ID: 372826

After recording, please return to:
Kara M. Hunter
Atlanta Gas Light Company
P.O. Box 4569
Atlanta, Georgia 30302

RE: *732 Nash Street*
See Exhibit "A" for a more complete description

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of the Atlanta Gas Light Company, owner of the property referenced above, and further that:

This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

IN WITNESS WHEREOF, the undersigned hereto has executed and sealed this affidavit, all as of the day and year of first written below.

Signed, sealed and delivered in the presence of:

Janet Mist
Unofficial Witness

Allison Massey
Notary Public
My Commission Expires Jan. 9, 2001
(NOTARIAL SEAL)

By: M. D. Hutchins (SEAL)
MICHAEL D. HUTCHINS
Vice President, Operations and Engineering

Date of Execution: August 12, 1998

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:28

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 1998034716 Book/Page: 00613/0429 Date Filed: 09/28/1998 10:31:00

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:29

Elaine C. Johnson, Richmond County Clerk of Superior Court

Reel 613 PAGE 429

EXHIBIT "A"

730 Ninth Street, 732 Ninth Street,
724 Ninth Street, 722 Ninth Street,
706 Ninth Street, and 837 Walton Way

ALL that tract or parcel of land, with improvements thereon, situate, lying and being in the City of Augusta, Richmond County, Georgia, located on the northeast corner of the intersection of Walton Way (formerly Calhoun Street) and Campbell (Ninth) Street, containing 0.73 acres, more or less, being triangular in shape, having a frontage of 177.21 feet on the north side of Walton Way and extending back along the east side of the right-of-way of Campbell (Ninth) Street for a distance of 305.02 feet on its western boundary, its northeastern boundary being 355.10 feet in length and extends along the western boundary of the right-of-way of the third level of the Augusta Canal. The property herein described includes all of the property lying between Campbell (Ninth) Street; Walton (formerly Calhoun Street); and the western boundary of the right-of-way of the third level of the Augusta Canal. Said property is shown and designated as "Tract 'A' 0.73 AC." on a previously unrecorded plat dated December 4, 1984, prepared by Baldwin & Cranston Associates, Inc., for First Railroad and Banking Company, and copy of which is recorded in said Clerk's Office.

BEING the same property conveyed to Donna E. Cheeks and Deborah E. Cheeks by Warranty Deed of First Railroad & Banking Company of Georgia dated December 30, 1986, and recorded in Realty Reel 248, page 2425, in said Clerk's Office.

SAID property is known as 706 Ninth Street, 722 Ninth Street, 724 Ninth Street, 730 Ninth Street, 732 Ninth Street and 837 Walton Way according to the system of street numbering currently in use by the City of Augusta, Richmond County, Georgia.

GA. RICHMOND COUNTY CLERK SUPERIOR COURT
FILED FOR RECORD 28 SEP 1998 AT 10:31AM
RECORDED 28 SEP 1998

This document is not to scale.

Instrument Number: 1998034717 Book/Page: 00613/0430 Date Filed: 09/28/1998 10:31:00

#19

(16)

FILED IN THIS OFFICE
RICHMOND COUNTY

98 SEP 28 AM 10:31

ELAINE C. JOHNSON
CLERK OF SUPERIOR COURT

REEL 613 PAGE 430

ORIGINAL REEL RECORDED
REEL 613 PAGE 430
WIP ID: 372827

After recording, please return to:
Kara M. Hunter
Atlanta Gas Light Company
P.O. Box 4569
Atlanta, Georgia 30302

RE: *724 Ninth Street*
See Exhibit "A" for a more complete description

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of the Atlanta Gas Light Company, owner of the property referenced above, and further that:

This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

IN WITNESS WHEREOF, the undersigned hereto has executed and sealed this affidavit, all as of the day and year of first written below.

Signed, sealed and delivered in the presence of:

Janet Mick
Unofficial Witness

Allyson Massey
Notary Public
My Commission expires:
Notary Public, Fulton County, Georgia
My Commission Expires Jan. 9, 2001

(NOTARIAL SEAL)

MICHAEL D. HUTCHINS (SEAL)
Vice President, Operations and Engineering

Date of Execution: August 10, 1998

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:30

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 1998034717 Book/Page: 00613/0431 Date Filed: 09/28/1998 10:31:00

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:32

Elaine C. Johnson, Richmond County Clerk of Superior Court

EXHIBIT "A"

710 Ninth Street, 732 Ninth Street,
724 Ninth Street, 722 Ninth Street,
706 Ninth Street, and 837 Walton Way

ALL that tract or parcel of land, with improvements thereon, situate, lying and being in the City of Augusta, Richmond County, Georgia, located on the northeast corner of the intersection of Walton Way (formerly Calhoun Street) and Campbell (Ninth) Street, containing 0.73 acres, more or less, being triangular in shape, having a frontage of 177.21 feet on the north side of Walton Way and extending back along the east side of the right-of-way of Campbell (Ninth) Street for a distance of 305.02 feet on its western boundary, its northeastern boundary being 355.10 feet in length and extends along the western boundary of the right-of-way of the third level of the Augusta Canal. The property herein described includes all of the property lying between Campbell (Ninth) Street; Walton (formerly Calhoun Street); and the western boundary of the right-of-way of the third level of the Augusta Canal. Said property is shown and designated as "Tract 'A' 0.73 AC." on a previously unrecorded plat dated December 4, 1984, prepared by Baldwin & Cranston Associates, Inc., for First Railroad and Banking Company, and copy of which is recorded in said Clerk's Office.

BEING the same property conveyed to Donna E. Cheeks and Deborah E. Cheeks by Warranty Deed of First Railroad & Banking Company of Georgia dated December 30, 1986, and recorded in Realty Reel 248, page 2425, in said Clerk's Office.

SAID property is known as 706 Ninth Street, 722 Ninth Street, 724 Ninth Street, 730 Ninth Street, 732 Ninth Street and 837 Walton Way according to the system of street numbering currently in use by the City of Augusta, Richmond County, Georgia.

GA: RICHMOND COUNTY CLERK SUPERIOR COURT
FILED FOR RECORD 28 SEP 1998 AT 10:31AM
RECORDED 28 SEP 1998

This document is not to scale.

Instrument Number: 1998034718 Book/Page: 00613/0432 Date Filed: 09/28/1998 10:31:00

#20

REEL 613 PAGE 432

(17)

FILED IN THIS OFFICE
RICHMOND COUNTY
98 SEP 28 AM 10: 31
ELAINE C. JOHNSON
CLERK OF SUPERIOR COURT

ORIGINAL REEL RECORDED
REEL 613 PAGE 432
MIP ID: 372828

After recording, please return to:
Kara M. Hunter
Atlanta Gas Light Company
P.O. Box 4569
Atlanta, Georgia 30302

RE: 722 Ninth Street
See Exhibit "A" for a more complete description

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of the Atlanta Gas Light Company, owner of the property referenced above, and further that:

This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

IN WITNESS WHEREOF, the undersigned hereto has executed and sealed this affidavit, all as of the day and year of first written below.

Signed, sealed and delivered in the presence of:

Janet Hirt
Unofficial Witness

Allyson Mooney
Notary Public
My Commission expires:
Notary Public, Walton County, Georgia
My Commission Expires Jan. 9, 2001

(NOTARIAL SEAL)

M. D. Hutchins (SEAL)
MICHAEL D. HUTCHINS
Vice President, Operations and Engineering

Date of Execution: August 10, 1998

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:33

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 1998034718 Book/Page: 00613/0433 Date Filed: 09/28/1998 10:31:00

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:34

Elaine C. Johnson, Richmond County Clerk of Superior Court

EXHIBIT "A"

730 Ninth Street, 732 Ninth Street,
724 Ninth Street, 722 Ninth Street,
706 Ninth Street, and 837 Walton Way

ALL that tract or parcel of land, with improvements thereon, situate, lying and being in the City of Augusta, Richmond County, Georgia, located on the northeast corner of the intersection of Walton Way (formerly Calhoun Street) and Campbell (Ninth) Street, containing 0.73 acres, more or less, being triangular in shape, having a frontage of 177.21 feet on the north side of Walton Way and extending back along the east side of the right-of-way of Campbell (Ninth) Street for a distance of 305.02 feet on its western boundary, its northeastern boundary being 355.10 feet in length and extends along the western boundary of the right-of-way of the third level of the Augusta Canal. The property herein described includes all of the property lying between Campbell (Ninth) Street; Walton (formerly Calhoun Street); and the western boundary of the right-of-way of the third level of the Augusta Canal. Said property is shown and designated as "Tract 'A' 0.73 AC." on a previously unrecorded plat dated December 4, 1984, prepared by Baldwin & Cranston Associates, Inc., for First Railroad and Banking Company, and copy of which is recorded in said Clerk's Office.

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GA, RICHMOND COUNTY CLERK SUPERIOR COURT
FILED FOR RECORD 28 SEP 1998 AT 10:31AM
RECORDED 28 SEP 1998

This document is not to scale.

Instrument Number: 1998034719 Book/Page: 00613/0434 Date Filed: 09/28/1998 10:31:00

#21

(18)

FILED IN THIS OFFICE
RICHMOND COUNTY
98 SEP 28 AM 10:31
ELAINE C. JOHNSON
CLERK OF SUPERIOR COURT

REEL 613 PAGE 434

ORIGINAL REEL RECORDED
REEL 613 PAGE 434
WIP ID: 372829

After recording, please return to:
Kara M. Hunter
Atlanta Gas Light Company
P.O. Box 4569
Atlanta, Georgia 30302

RE: *706 Ninth Street*
See Exhibit "A" for
a more complete
description

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of the Atlanta Gas Light Company, owner of the property referenced above, and further that:

This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

IN WITNESS WHEREOF, the undersigned hereto has executed and sealed this affidavit, all as of the day and year of first written below.

Signed, sealed and delivered in the presence of:

Janet Mink
Unofficial Witness

Allyson Massey
Notary Public
My Commission expires:
Notary Public, Fulton County, Georgia
My Commission Expires Jan. 9, 2001

(NOTARIAL SEAL)

pp MICHAEL D. HUTCHINS
Vice President, Operations and Engineering

Date of Execution: August 12, 1998

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:35

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 1998034719 Book/Page: 00613/0435 Date Filed: 09/28/1998 10:31:00

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:36

Elaine C. Johnson, Richmond County Clerk of Superior Court

EXHIBIT "A"

730 Ninth Street, 732 Ninth Street,
724 Ninth Street, 722 Ninth Street,
706 Ninth Street, and 837 Walton Way

ALL that tract or parcel of land, with improvements thereon, situate, lying and being in the City of Augusta, Richmond County, Georgia, located on the northeast corner of the intersection of Walton Way (formerly Calhoun Street) and Campbell (Ninth) Street, containing 0.73 acres, more or less, being triangular in shape, having a frontage of 177.21 feet on the north side of Walton Way and extending back along the east side of the right-of-way of Campbell (Ninth) Street for a distance of 305.02 feet on its western boundary, its northeastern boundary being 355.10 feet in length and extends along the western boundary of the right-of-way of the third level of the Augusta Canal. The property herein described includes all of the property lying between Campbell (Ninth) Street; Walton (formerly Calhoun Street); and the western boundary of the right-of-way of the third level of the Augusta Canal. Said property is shown and designated as "Tract 'A' 0.73 AC." on a previously unrecorded plat dated December 4, 1984, prepared by Baldwin & Cranston Associates, Inc., for First Railroad and Banking Company, and copy of which is recorded in said Clerk's Office.

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GA, RICHMOND COUNTY CLERK SUPERIOR COURT
FILED FOR RECORD 28 SEP 1998 AT 10:31AM
RECORDED 28 SEP 1998

This document is not to scale.

Instrument Number: 1998034720 Book/Page: 00613/0436 Date Filed: 09/28/1998 10:31:00

#22

REEL 613 PAGE 436

(19)

FILED IN THIS OFFICE
RICHMOND COUNTY
98 SEP 28 AM 10:31
ELAINE C. JOHNSON
CLERK OF SUPERIOR COURT

ORIGINAL REEL RECORDED
REEL 613 PAGE 436
WIP ID: 372838

After recording, please return to:
Kara M. Hunter
Atlanta Gas Light Company
P.O. Box 4569
Atlanta, Georgia 30302

RE: *837 Wallen Way*
See Exhibit "A" for a more complete description

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of the Atlanta Gas Light Company, owner of the property referenced above, and further that:

This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

IN WITNESS WHEREOF, the undersigned hereto has executed and sealed this affidavit, all as of the day and year of first written below.

Signed, sealed and delivered in the presence of:

Unofficial Witness

Notary Public
Notary Public, Walton County, Georgia
My Commission Expires Jan. 9, 2001

(NOTARIAL SEAL)

MICHAEL D. HUTCHINS
Vice President, Operations and Engineering

Date of Execution: August 12, 1998

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:38

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 1998034720 Book/Page: 00613/0437 Date Filed: 09/28/1998 10:31:00

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:15:39

Elaine C. Johnson, Richmond County Clerk of Superior Court

EXHIBIT "A"

730 Ninth Street, 732 Ninth Street,
724 Ninth Street, 722 Ninth Street,
706 Ninth Street, and 837 Walton Way

ALL that tract or parcel of land, with improvements thereon, situate, lying and being in the City of Augusta, Richmond County, Georgia, located on the northeast corner of the intersection of Walton Way (formerly Calhoun Street) and Campbell (Ninth) Street, containing 0.73 acres, more or less, being triangular in shape, having a frontage of 177.21 feet on the north side of Walton Way and extending back along the east side of the right-of-way of Campbell (Ninth) Street for a distance of 305.02 feet on its western boundary, its northeastern boundary being 355.10 feet in length and extends along the western boundary of the right-of-way of the third level of the Augusta Canal. The property herein described includes all of the property lying between Campbell (Ninth) Street; Walton (formerly Calhoun Street); and the western boundary of the right-of-way of the third level of the Augusta Canal. Said property is shown and designated as "Tract 'A' 0.73 AC." on a previously unrecorded plat dated December 4, 1984, prepared by Baldwin & Cranston Associates, Inc., for First Railroad and Banking Company, and copy of which is recorded in said Clerk's Office.

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GA. RICHMOND COUNTY CLERK SUPERIOR COURT
FILED FOR RECORD 28 SEP 1998 AT 10:31AM
RECORDED 28 SEP 1998

This document is not to scale.

Parcel 046-4-764-00-0

Instrument Number: 2001015531 Book/Page: 00731/1398 Date Filed: 05/29/2001 15:29:58.02

Book 00731:1398 Augusta - Richmond County
2001015531 05/29/2001 15:29:58.02
$18.00 DECLARATION RESTRICTIVE COVENA
2001015531 Augusta - Richmond County

#53

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:01

Elaine C. Johnson, Richmond County Clerk of Superior Court

AFTER RECORDING RETURN TO:
Carol Geiger
Kilpatrick Stockton LLP
1100 Peachtree Street, Suite 2800
Atlanta, Georgia 30309-4530

DECLARATION OF RESTRICTIVE COVENANTS AND NOTICE

THIS DECLARATION is made this 23rd day of May 2001, by **ATLANTA GAS LIGHT COMPANY** a Georgia Corporation (hereinafter referred to as "Declarant").

WITNESSETH:

WHEREAS, Declarant owns the property described on Exhibit "A" hereto attached and made a part hereof (the "Property"); and

WHEREAS, the Property contains "hazardous substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*, and, accordingly, Declarant desires to restrict the use of the Property as provided herein.

NOW, THEREFORE, Declarant does hereby subject the Property to the covenants, restrictions, easements and rights hereinafter stated:

1. Definitions. For purposes of this Declaration, the following terms shall have the following meanings, unless the context requires otherwise:

This document is not to scale.

Instrument Number: 2001015531 Book/Page: 00731/1399 Date Filed: 05/29/2001 15:29:58.02

Book 00731:1399 Augusta - Richmond County
2001015531 05/29/2001 15:29:58.02

"AGLC" shall mean Atlanta Gas Light Company, a Georgia corporation, its successors and assigns.

"Director" shall mean the Director of EPD, as hereinafter defined.

"EPD" shall mean the Georgia Department of Natural Resources, Environmental Protection Division, as well as any successor state agency with responsibility for and jurisdiction over environmental matters.

"Hazardous Substances" shall have the same meaning as under HSRA, as hereinafter defined.

"HSRA" shall mean the Hazardous Site Response Act, O.C.G.A. § 12-8-90, *et seq.* and the rules and regulations promulgated thereunder.

2. Restrictive Covenants. Declarant hereby prohibits the use of groundwater beneath the Property as a source of drinking water or for any other purpose that could result in human ingestion as defined in the Rules for HSRA, Rule 391-3-19-.02(2)(i), incorporated herein by reference, in effect at the time of this Declaration. Declarant hereby restricts the use of the Property to non-residential uses as defined in the Rules for HSRA in effect at the time of this Declaration. The foregoing are hereinafter collectively the referred to as the "Restrictive Covenants."

3. Improvements. Any and all improvements located in whole or in part on all or any portion of the Property, and the construction, operation, use and maintenance of the Property and such improvements, shall be subject to and shall comply with the Restrictive Covenants.

4. Covenants running with the land. Declarant acknowledges and agrees that the Restrictive Covenants are appurtenant to and run with the land, and shall be binding and enforceable against all future owners of the Property including Declarant, its successors and assigns, and any trustee appointed to manage the Property. Should a transfer or sale of the Property occur before such time as the Restrictive Covenants have been amended or revoked then said Restrictive Covenants shall be binding on the transferee(s) or purchaser(s).

The Restrictive Covenants shall inure to the benefit of EPD, AGLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns and AGLC or its successors and assigns in a court of competent jurisdiction. The Restrictive Covenants shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60(c), unless and until the Director determines that the Property meets Type 1 or 2 Risk Reduction Standards, as defined in the Rules for Hazardous Site Response Chapter 391-3-19-.07.

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:02

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Book 00731:1400 Augusta - Richmond County
2001015531 05/29/2001 15:29:58.02

5. Severability. In the event that any of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect in a final ruling or judgment of a court of competent jurisdiction from which no appeal has been or can be taken, the remainder of the Restrictive Covenants shall not be affected thereby and each term, covenant, condition and provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

6. Statutory Notice. This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act. This Declaration is a condition of approval for the Corrective Action Plan submitted to EPD on May 27, 2001 and all modifications submitted thereafter for the Property and is a requirement under Consent Order EPD-HW-1390 entered into by AGLC on July 11, 2000.

7. General Provisions.

(a) Headings. The use of headings, captions and numbers in this Declaration is solely for the convenience of identifying and indexing the various provisions in this Declaration and shall in no event be considered otherwise in construing or interpreting any provision in this Declaration.

(b) Non-Waiver. Failure by any party to complain of any action, non-action or breach of any other party shall not constitute a waiver of any aggrieved party's rights hereunder. Waiver by any party of any right arising from any breach of any other party shall not constitute a waiver of any other right arising from a subsequent breach of the same obligation or for any other default, past, present or future.

(c) Time of Essence. Time is of the essence of this Declaration.

REMAINDER OF THE PAGE INTENTIONALLY LEFT BLANK

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:04

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Book 00731:1401 Augusta - Richmond County
2001015531 05/29/2001 15:29:58.02

(d) Applicable Law. This Declaration shall be governed by, construed under and interpreted and enforced in accordance with the laws of the State of Georgia.

IN WITNESS WHEREOF, Declarant has signed and sealed this Declaration, all the day, month, and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

(NOTARY SEAL)

My Commission Expires:

Notary Public, Rockdale County, Georgia
My Commission Expires March 17, 2002

DECLARANT:
ATLANTA GAS LIGHT COMPANY,
a Georgia Corporation

By:
Paul R. Shlanta
Senior Vice President

(CORPORATE SEAL)

ATLLIB01 1163892.1

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:05

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 2001015531 Book/Page: 00731/1402 Date Filed: 05/29/2001 15:29:58.02

Book 00731:1402 Augusta - Richmond County
2001015531 05/29/2001 15:29:58.02

EXHIBIT A

ALL that tract or parcel of land, with improvements thereon, situate, lying and being in the City of Augusta, Richmond County, Georgia, located on the northeast corner of the intersection of Walton Way (formerly Calhoun Street) and Campbell (Ninth) Street, containing 0.73 acres, more or less, being triangular in shape, having a frontage of 177.21 feet on the north side of Walton Way and extending back along the east side of the right-of-way of Campbell (Ninth) Street for a distance of 305.02 feet on its western boundary, its northeastern boundary being 355.10 feet in length and extends along the western boundary of the right-of-way of the third level of the Augusta Canal. The property herein described includes all of the property lying between Campbell (Ninth) Street; Walton (formerly Calhoun Street); and the western boundary of the right-of-way of the third level of the Augusta Canal. Said property is shown and designated as "Tract 'A' 0.73 AC." on plat dated December 4, 1984, prepared by Baldwin & Cranston Associates, Inc. for First Railroad and Banking Company, and copy of which is recorded in Realty Reel 570, pages 2373-2378, in the Office of the Clerk of Superior Court of Richmond County, Georgia.

BEING the same property conveyed to Donna E. Cheeks and Deborah E. Cheeks by Warranty Deed of First Railroad & Banking Company of Georgia dated December 30, 1986, and recorded in Realty Reel 248, page 2425, in said Clerk's Office.

SAID property is known as 706 Ninth Street, 722 Ninth Street, 724 Ninth Street, 730 Ninth Street, 732 Ninth Street and 837 Walton Way according to the system of street numbering currently in use by the City of Augusta, Richmond County, Georgia.

Filed in this office:
Augusta - Richmond County
05/29/2001 15:29:58.02
Elaine C. Johnson

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:14:06

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Parcel 047-3-340-00-0 and Portion of Parcel 047-3-341-00-0

Instrument Number: 2001015528 Book/Page: 00731/1383 Date Filed: 05/29/2001 15:29:57.00

Book 00731:1383 Augusta - Richmond County
2001015528 05/29/2001 15:29:57.00
$18.00 DECLARATION RESTRICTIVE COVENA
2001015528 Augusta - Richmond County

#50

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:13:42

Elaine C. Johnson, Richmond County Clerk of Superior Court

AFTER RECORDING RETURN TO:
Carol Geiger
Kilpatrick Stockton LLP
1100 Peachtree Street, Suite 2800
Atlanta, Georgia 30309-4530

DECLARATION OF RESTRICTIONS, COVENANTS AND EASEMENT

THIS DECLARATION is made this 30th day of April 2001 by **ROBERT WASHINGTON** (hereinafter referred to as "Declarant").

WITNESSETH:

WHEREAS, Declarant owns the property described on Exhibit "A" hereto attached and made a part hereof (the "Property"); and

WHEREAS, the Property contains "hazardous substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*, and, accordingly, Declarant desires to restrict the use of the Property and grants to AGLC easements to go on, under, over and through the Property as provided herein.

NOW, THEREFORE, for and in consideration of Ten and No/100 Dollars ($10.00) and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged and intending to be legally bound, Declarant does hereby subject the Property to the covenants, restrictions, easements and rights hereinafter stated:

This document is not to scale.

Instrument Number: 2001015528 Book/Page: 00731/1384 Date Filed: 05/29/2001 15:29:57.00

Book 00731:1384 Augusta - Richmond County
2001015528 05/29/2001 15:29:57.00

1. Definitions. For purposes of this Declaration, the following terms shall have the following meanings, unless the context requires otherwise:

"AGLC" shall mean Atlanta Gas Light Company, a Georgia corporation, its successors and assigns.

"Director" shall mean the Director of EPD, as hereinafter defined.

"EPD" shall mean the Georgia Department of Natural Resources, Environmental Protection Division, as well as any successor state agency with responsibility for and jurisdiction over environmental matters.

"Hazardous Substances" shall have the same meaning as under HSRA, as hereinafter defined.

"HSRA" shall mean the Hazardous Site Response Act, O.C.G.A. § 12-8-90, *et seq.*

2. Restrictive Covenants. Declarant hereby prohibits the use of groundwater beneath the Property as a source of drinking water or for any other purpose that could result in human ingestion as defined in the Rules for HSRA, Rule 391-3-19-.02(2)(i), incorporated herein by reference, in effect at the time of this Declaration. Declarant hereby restricts the use of the Property to non-residential uses as defined in the Rules for HSRA in effect at the time of this Declaration. The foregoing are hereinafter referred to as the "Restrictive Covenants."

3. Easement. Declarant hereby grants to AGLC, and its agents, employees, representatives and contractors, a nonexclusive permanent, perpetual right, privilege and easement in, upon, under, across and through the Property, for purposes of further investigating, remediating, remedying or otherwise taking responsive action, as AGLC deems necessary or desirable, with respect to manufactured gas plant impacts, as identified in the Corrective Action Plan dated March 27, 2001, as amended. The foregoing is hereinafter referred to as the "Easement."

4. Improvements. Any and all improvements located in whole or in part on all or any portion of the Property, and the construction, operation, use and maintenance of the Property and such improvements, shall be subject to and shall comply with the Restrictive Covenants and Easement.

5. Covenants running with the land. Declarant acknowledges and agrees that the Restrictive Covenants and Easement are appurtenant to and run with the land, and shall be binding and enforceable against all future owners of the Property including Declarant, its successors and assigns, and any trustee appointed to manage the Property. Should a transfer

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:13:43

Elaine C. Johnson, Richmond County Clerk of Superior Court

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Book 00731:1385 Augusta - Richmond County
2001015528 05/29/2001 15:29:57.00

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:13:45

Elaine C. Johnson, Richmond County Clerk of Superior Court

or sale of the Property occur before such time as the Restrictive Covenants and Easement have been amended or revoked then said Restrictive Covenants and Easement shall be binding on the transferee(s) or purchaser(s).

The Restrictive Covenants shall inure to the benefit of EPD, AGLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns and AGLC or its successors and assigns in a court of competent jurisdiction. The Easement shall inure to the benefit of AGLC and its successors and assigns and shall be enforceable by AGLC, its successors and assigns in a court of competent jurisdiction. The Restrictive Covenants and Easement shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60(c), unless and until the Director determines that the Property meets Type 1 or 2 Risk Reduction Standards, as defined in the Rules for Hazardous Site Response Chapter 391-3-19-.07.

6. Severability. In the event that any of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect in a final ruling or judgment of a court of competent jurisdiction from which no appeal has been or can be taken, the remainder of the Restrictive Covenants and Easement shall not be affected thereby and each term, covenant, condition and provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

7. Statutory Notice. This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act. This Declaration is a condition of approval for the Corrective Action Plan submitted to EPD on March 27, 2001 and all modifications submitted thereafter for the Property and is a requirement under Consent Order EPD-HW-1390 entered into by AGLC on July 11, 2000.

8. General Provisions.

(a) Headings. The use of headings, captions and numbers in this Declaration is solely for the convenience of identifying and indexing the various provisions in this Declaration and shall in no event be considered otherwise in construing or interpreting any provision in this Declaration.

(b) Non-Waiver. Failure by any party to complain of any action, non-action or breach of any other party shall not constitute a waiver of any aggrieved party's rights hereunder. Waiver by any party of any right arising from any breach of any other party shall not constitute a waiver of any other right arising from a subsequent breach of the same obligation or for any other default, past, present or future.

This document is not to scale.

Instrument Number: 2001015528 Book/Page: 00731/1386 Date Filed: 05/29/2001 15:29:57.00

Book 00731:1386 Augusta - Richmond County
2001015528 05/29/2001 15:29:57.00

(c) Time of Essence. Time is of the essence of this Declaration.

(d) Applicable Law. This Declaration shall be governed by, construed under and interpreted and enforced in accordance with the laws of the State of Georgia.

IN WITNESS WHEREOF, Declarant has signed and sealed this Declaration, all the day, month, and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

(NOTARY SEAL)

My Commission Expires:

Notary Public, Richmond County, Georgia
My Commission Expires February 28, 2004

DECLARANT:
ROBERT WASHINGTON

By:

Name:

Title: Owner

(CORPORATE SEAL)

ATLLIB01 1143318.1

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:13:46

Elaine C. Johnson, Richmond County Clerk of Superior Court

This document is not to scale.

Instrument Number: 2001015528 Book/Page: 00731/1387 Date Filed: 05/29/2001 15:29:57.00

Book 00731:1387 Augusta - Richmond County
2001015528 05/29/2001 15:29:57.00

EXHIBIT "A"

ALL that lot, tract or parcel of land, with all improvements thereon, #929 Seventh Street in Augusta, Richmond County, Georgia, and having a frontage of Fifty (50) feet, more or less, on the West side of Seventh (McIntosh) Street, between Taylor Street and the third level of the Augusta Canal, and measuring on its North boundary line 201 feet, more or less, and on its Southern boundary line 195 feet, more or less, and having a rear width of 50 feet, more or less, or 58.9 feet, more or less, according to the City Plat Book, and extending back from Seventh Street to the Augusta Canal, and bounded now or formerly: North by property now or formerly of Pollard; East by Seventh Street; South by property now or formerly of Catherine Driscoll and West by the Augusta Canal. Said lot is also known as Lot No. 26, Block 60, Ward 2, City of Augusta Plat Book, which shows Seventh Street frontage as 50 feet, the Northern line as 269 feet and rear width 58.9 feet, and being a portion of the property conveyed to Robert L. Washington by Warranty Deed dated October 20, 1989, and recorded in said Clerk's Office in Realty Book 321, page 1888.

ALSO ALL that lot of land with improvements thereon, situate, lying and being in the city of Augusta, Richmond County, Georgia, on the west side of Seventh Street (formerly called McIntosh Street) between Taylor Street and the Third level of the Augusta Canal, said lot having a frontage of Fifty One (51) feet on Seventh Street, and extending back of even width in a westerly direction to a strip of land 34 feet wide separating said lot from the eastern bank of the Third Level of the Augusta Canal, the depth on the northern boundary line being Two Hundred and Thirty Five (235) feet more or less and on the southern boundary line Two Hundred and Eight (208) feet more or less, the said lot hereby conveyed is shown by a plat attached to that certain Deed dated November 11, 1914 of Catherine Driscoll to Ellen Lombard Fortson and recorded with the Office of the Clerk of Superior Court of Richmond County in Realty Book 8-D, pages 256-257 and is bounded: North by a lot formerly conveyed by said Catharine Driscoll to Norman A. Hicks; West by said 34 feet strip of land separating said lot from said Third Level of the Augusta Canal; South by other lands currently or formerly of said Catharine Driscoll and East by Seventh Street. The said lot is a portion of the lands conveyed to Elizabeth A. Malone by the City Council of Augusta by deed dated May 16th, 1882 and recorded in Book 3 Ms, folio 294 in the clerks office of the Superior Court of said Richmond County, and was devised to said Catherine in the Will of Elizabeth A. Quinn (formerly Elizabeth A. Malone) and conveyed to said Catharine in persuance of said Will by D.G. Fogarty, Executor of Elizabeth A. Quinn, by deed dated May 31st, 1913 and recorded in Book 7 Us, folio 531 in said Clerks office. The said lot is a portion of the lands conveyed to Robert L. Washington by that certain Warranty Deed of C&E, Inc. recorded with the Office of the Clerk of Superior Court of Richmond County, Georgia in Realty Book 321, page 1888.

Filed in this office:
Augusta - Richmond County
05/29/2001 15:29:57.00
Elaine C. Johnson

This document is not to scale.

J NOEL SCHWEERS III PC, leonard, 04/13/2009 11:13:47

Elaine C. Johnson, Richmond County Clerk of Superior Court

Portion of Fenwick St/Portion of King St

Type 4

Book 00731:1022 Augusta - Richmond County
2001015443 05/25/2001 16:16:03.00
$0.00 DECLARATION RESTRICTIVE COVENA
2001015443 Augusta - Richmond County

Fin 6911

AFTER RECORDING RETURN TO:
Carol Geiger
Kilpatrick Stockton LLP
1100 Peachtree Street, Suite 2800
Atlanta, Georgia 30309-4530

DECLARATION OF RESTRICTIONS AND COVENANTS

THIS DECLARATION is made this 23rd day of May 2001, by **AUGUSTA, GEORGIA** (hereinafter referred to as "Declarant").

W I T N E S S E T H:

WHEREAS, Declarant owns the property described on Exhibit "A" hereto attached and made a part hereof (the "Property"); and

WHEREAS, the Property contains "hazardous substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*, associated with the former Atlanta Gas Light Company manufactured gas plant which was located in close proximity to the Property and, accordingly, Declarant agrees to restrict the use of the Property as provided herein.

NOW, THEREFORE, for and in consideration of Ten and No/100 Dollars ($10.00) and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged and intending to be legally bound, Declarant does hereby subject the Property to the covenants, restrictions and rights hereinafter stated:

1. Definitions. For purposes of this Declaration, the following terms shall have the following meanings, unless the context requires otherwise:

"AGLC" shall mean Atlanta Gas Light Company, a Georgia corporation, its successors and assigns.

"Director" shall mean the Director of EPD, as hereinafter defined.

"EPD" shall mean the Georgia Department of Natural Resources, Environmental Protection Division, as well as any successor state agency with responsibility for and jurisdiction over environmental matters.

"Hazardous Substances" shall have the same meaning as under HSRA, as hereinafter defined.

"HSRA" shall mean the Hazardous Site Response Act, O.C.G.A. § 12-8-90, *et seq.*

2. Restrictive Covenants. Declarant hereby prohibits the use of groundwater beneath the Property as a source of drinking water or for any other purpose that could result in human ingestion as defined in the Rules for HSRA, Rule 391-3-19-.02(2)(i), incorporated herein by reference, in effect at the time of this Declaration. Declarant hereby restricts the use of the Property to non-residential uses as defined in the Rules for HSRA in effect at the time of this Declaration. The foregoing are hereinafter referred to as the "Restrictive Covenants."

3. Improvements. Any and all improvements located in whole or in part on all or any portion of the Property, and the construction, operation, use and maintenance of the Property and such improvements, shall be subject to and shall comply with the Restrictive Covenants.

4. Covenants running with the land. Declarant acknowledges and agrees that the Restrictive Covenants are appurtenant to and run with the land, and shall be binding and enforceable against all future owners of the Property including Declarant, its successors and assigns, and any trustee appointed to manage the Property. Should a transfer or sale of the Property occur before such time as the Restrictive Covenants have been amended or revoked then said Restrictive Covenants shall be binding on the transferee(s) or purchaser(s).

The Restrictive Covenants shall inure to the benefit of EPD, AGLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns and AGLC or its successors and assigns in the Superior Court of Richmond County, Georgia. The Restrictive Covenants shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60(c), unless and until the Director determines that the Property meets Type

1 or 2 Risk Reduction Standards, as defined in the Rules for Hazardous Site Response Chapter 391-3-19-.07.

5. Severability. In the event that any of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect in a final ruling or judgment of a court of competent jurisdiction from which no appeal has been or can be taken, the remainder of the Restrictive Covenants shall not be affected thereby and each term, covenant, condition and provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

6. Statutory Notice. This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act. This Declaration is a condition of approval for the Corrective Action Plan submitted to EPD on March 27, 2001 and all modifications submitted thereafter for the Property and is a requirement under Consent Order EPD-HW-1390 entered into by AGLC on July 11, 2000.

7. General Provisions.

(a) Headings. The use of headings, captions and numbers in this Declaration is solely for the convenience of identifying and indexing the various provisions in this Declaration and shall in no event be considered otherwise in construing or interpreting any provision in this Declaration.

(b) Non-Waiver. Failure by any party to complain of any action, non-action or breach of any other party shall not constitute a waiver of any aggrieved party's rights hereunder. Waiver by any party of any right arising from any breach of any other party shall not constitute a waiver of any other right arising from a subsequent breach of the same obligation or for any other default, past, present or future.

(c) Time of Essence. Time is of the essence of this Declaration.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

Book 00731:1025 Augusta - Richmond County
2001015443 05/25/2001 16:16:03.(

(d) Applicable Law. This Declaration shall be governed by, construed under and interpreted and enforced in accordance with the laws of the State of Georgia.

IN WITNESS WHEREOF, Declarant has signed and sealed this Declaration, all the day, month, and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

(NOTARY SEAL)

My Commission Expires:

JAMES B. WALL
Notary Public
STATE OF GEORGIA
My Comm. Exp. 8/30/02

DECLARANT:
AUGUSTA, GEORGIA

By:

Name:

Title: Mayor

Attest:
Clerk

Type 4 RRS

Book 00731 1027 Augusta - Richmond County
2001015443 05/25/2001 16: 16:03.0

Exhibit A

1. Within the Third Level Canal right-of-way between the southeastern corner of the right of way for 9th and the right of way for Fenwick Streets intersection and the northern edge of the right of way for Walton Way; and

2. An 80-foot length of the right of way for Fenwick Street located approximately 230-310 feet east of the right of way for 9th Street, and a 280-foot length of the right of way for Fenwick Street from the western edge of 8th Street westward; and

3. An approximately 80-foot section of the right of way of 10th Street extending from the southern edge of the right of way of Walker Street south; and

4. Approximately 260 feet of the southern end of the right of way for King Street, from the Third Level Canal right of way north.

Filed in this office:
Augusta - Richmond County
05/25/2001 16:16:03.00
Elaine C. Johnson

Portion of Walton Way/Portion of 8th St/Portion of Taylor St

Type 5

Book 00731:1028 Augusta - Richmond County
2001015444 05/25/2001 16:16:03.01
$0.00 DECLARATION RESTRICTIVE COVENA
2001015444 Augusta - Richmond County

Tim Wall

AFTER RECORDING RETURN TO:
Carol Geiger
Kilpatrick Stockton LLP
1100 Peachtree Street, Suite 2800
Atlanta, Georgia 30309-4530

DECLARATION OF RESTRICTIONS AND COVENANTS

THIS DECLARATION is made this 24th day of May 2001, by **AUGUSTA, GEORGIA** (hereinafter referred to as "Declarant").

W I T N E S S E T H:

WHEREAS, Declarant owns the property described on Exhibit "A" hereto attached and made a part hereof (the "Property"); and

WHEREAS, the Property contains "hazardous substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. §12-8-90, *et seq.*, associated with the former Atlanta Gas Light Company manufactured gas plant which was located in close proximity to the Property and, accordingly, Declarant agrees to restrict the use of the Property as provided herein.

NOW, THEREFORE, for and in consideration of Ten and No/100 Dollars ($10.00) and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged and intending to be legally bound, Declarant does hereby subject the Property to the covenants, restrictions and rights hereinafter stated:

1. Definitions. For purposes of this Declaration, the following terms shall have the following meanings, unless the context requires otherwise:

"AGLC" shall mean Atlanta Gas Light Company, a Georgia corporation, its successors and assigns.

"Director" shall mean the Director of EPD, as hereinafter defined.

"EPD" shall mean the Georgia Department of Natural Resources, Environmental Protection Division, as well as any successor state agency with responsibility for and jurisdiction over environmental matters.

"Hazardous Substances" shall have the same meaning as under HSRA, as hereinafter defined.

"HSRA" shall mean the Hazardous Site Response Act, O.C.G.A. § 12-8-90, *et seq.*

2. Restrictive Covenants. Declarant hereby:

a. prohibits the use of groundwater beneath the Property as a source of drinking water or for any other purpose that could result in human ingestion as defined in the Rules for HSRA, Rule 391-3-19-.02(2)(i), incorporated herein by reference, in effect at the time of this Declaration;

b. restricts the use of the Property to non-residential uses as defined in the Rules for HSRA in effect at the time of this Declaration;

c. prohibits the disturbance of any material stabilized in accordance with the Corrective Action Plan submitted on March 27, 2001, and all modifications submitted thereafter, without prior notice to and approval from EPD; and

d. agrees to install and maintain permanent markers on each side of the Property that delineate the restricted area and prohibits the disturbance or removal of such markers.

This Declaration is made in accordance with Ga. Comp. R. & Regs. 391-3-19-.08(7), which expressly authorizes the use of restrictive covenants to prohibit activities on the Property that may substantially interfere with a remedial action, operation and maintenance, long-term monitoring, or other measures to ensure the integrity of any remedial action. The foregoing are hereinafter collectively referred to as the "Restrictive Covenants".

3. Improvements. Any and all improvements located in whole or in part on all or any portion of the Property, and the construction, operation, use and maintenance of the Property and such improvements, shall be subject to and shall comply with the Restrictive Covenants.

4. Covenants running with the land. Declarant acknowledges and agrees that the Restrictive Covenants are appurtenant to and run with the land, and shall be binding and enforceable against all future owners of the Property including Declarant, its successors and assigns, and any trustee appointed to manage the Property. Should a transfer or sale of the Property occur before such time as the Restrictive Covenants have been amended or revoked then said Restrictive Covenants shall be binding on the transferee(s) or purchaser(s).

The Restrictive Covenants shall inure to the benefit of EPD, AGLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns and AGLC or its successors and assigns in the Superior Court of Richmond County, Georgia. The Restrictive Covenants shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60(c), unless and until the Director determines that the Property meets Type 1 or 2 Risk Reduction Standards, as defined in the Rules for Hazardous Site Response Chapter 391-3-19-.07.

5. Severability. In the event that any of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect in a final ruling or judgment of a court of competent jurisdiction from which no appeal has been or can be taken, the remainder of the Restrictive Covenants shall not be affected thereby and each term, covenant, condition and provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

6. Statutory Notice. This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act. This Declaration is a condition of approval for the Corrective Action Plan submitted to EPD on March 27, 2001 and all modifications submitted thereafter for the Property and is a requirement under Consent Order EPD-HW-1390 entered into by AGLC on July 11, 2000.

7. General Provisions.

(a) Headings. The use of headings, captions and numbers in this Declaration is solely for the convenience of identifying and indexing the various provisions in this Declaration and shall in no event be considered otherwise in construing or interpreting any provision in this Declaration.

(b) Non-Waiver. Failure by any party to complain of any action, non-action or breach of any other party shall not constitute a waiver of any aggrieved party's rights hereunder. Waiver by any party of any right arising from any breach of any other

party shall not constitute a waiver of any other right arising from a subsequent breach of the same obligation or for any other default, past, present or future.

(c) Time of Essence. Time is of the essence of this Declaration.

(d) Applicable Law. This Declaration shall be governed by, construed under and interpreted and enforced in accordance with the laws of the State of Georgia.

IN WITNESS WHEREOF, Declarant has signed and sealed this Declaration, all the day, month, and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

[NOTARY SEAL] YANESA B. WALL Notary Public STATE OF GEORGIA My Comm. Exp. 8/3/04

My Commission Expires:

DECLARANT:
AUGUSTA, GEORGIA

By:

Name: Bob Young

Title: Mayor

Attest:
Clerk

Form 0731:1032 Augusta - Richmond County
2001015444 05/25/2001 16:16:03.01

Type 5 RRS

Book 00731:1033 Augusta - Richmond County
2001015444 05/25/2001 16:16:03.01

Exhibit A

1. Within the Third Level Canal right-of-way between 11th Street and the intersection of 9th and Fenwick Streets; and

2. Within right of way for Walton Way between western edge of the bridge over the Third Level Canal and the western edge of the right of way for 8th Street; and

3. Within the Third Level Canal right-of-way between the northern edge of the right of way for the right of way for Walton Way and the eastern edge of the right of way for 8th Street; and

4. Within 8th Street between the right of way for Walton Way and the right of way for Taylor Street; approximately the width of the Third Level Canal right of way and approximately 70 feet south of the southern edge of the right of way for the right of way for Walton Way and 35 feet north of the northern edge of the right of way for Taylor Street.

Filed in this office:
Augusta - Richmond County
05/25/2001 16:16:03.01
Elaine C. Johnson

Parcel 046-2-053-01-0

Book 01233:1332 Augusta - Richmond County
2009039657 10/01/2009 15:35:12.00
$18.00 AFFIDAVIT
2009039657 Augusta - Richmond County

Return to: J. Noel Schweers III, P.C.
Post Office Box 31390
Augusta, Georgia 30903-1390

Cross Reference: **Realty Reel 171, page 2686**
Deed Book 952, page 1404

Please Return To: Carol R. Geiger
Kazmarek Geiger & Laseter LLP
One Securities Center
3490 Piedmont Rd. NE, Suite 201
Atlanta, Georgia 30305

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of County Board of Education of Richmond County, deposes and says on oath as follows:

(1) That County Board of Education of Richmond County is the fee simple owner of all that tract or parcel of land situated in Richmond County, Georgia, as being more fully described on Exhibit "A" attached hereto (the "Property").

2) That the Property has been designated on the Hazardous Site Inventory as HSI Site No. 10132 as needing corrective action pursuant to Rule 391-3-19.06(6) of the Georgia Rules for Hazardous Site Response.

(3) That in accordance with Rule 391-3-19-.08(2), Deponent gives notice:

> "This property has been listed on that state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning the property. This notice is provided in compliance with the Georgia Hazardous Site Response Act."

IN WITNESS WHEREOF, that County Board of Education of Richmond County has executed this Affidavit this 15 day of September, 2009.

Signed, sealed and delivered in our presence in Richmond County, State of Georgia

Witness

Notary Public, County of McDuffie,
State of Georgia
My Commission Expires: April 4, 2011
(SEAL)

Notary Public, McDuffie County, Georgia
My Commission Expires April 4, 2011

County Board of Education of Richmond County

By: Marion Barnes

As its President

Exhibit "A"

All that tract or parcel of land, situate, lying and being in the City of Augusta, County of Richmond, State of Georgia, and fronting 135.25 feet on the East side of 12th Street, containing 0.89 acres, and lying between points A, B, C, D, E, and F on a plat, dated July 18, 1983, made for County Board of Education Richmond County, by Bobby G. Price, Registered Land Surveyor, recorded at Realty Reel 171, page 2687, in the Office of the Clerk of Superior Court for Richmond County, Georgia. Reference is hereby made to said plat for a more complete description as to metes, bounds, distances and location of said property.

Also, all that tract or parcel of land, situate, lying and being in the City of Augusta, County of Richmond, State of Georgia and fronting 10.13 feet on the eastern right-of-way of 12th Street and extending back between approximately parallel lines to a rear width of 10.76 feet, said parcel being designated as a "10 foot trailing path" on the above referenced plat. Reference is hereby made to said plat for a more complete description as to metes, bounds, distances and location of said property.

This being the same property conveyed to the County Board of Education by deed, dated August 31, 1983, recorded in Realty Reel 171, page 2686, in the Office of the Clerk of Superior Court for Richmond County, Georgia,.

Less and except from the above parcels, all that tract or parcel of land conveyed to Augusta, Georgia, by Right-of-Way Deed, dated August 12, 2004, recorded in Book 952, page 1404, in said Clerk's Office.

Tax Id# 046-2-053-01-0

Parcel 047-3-362-00-0

Book 01270:1528 Augusta - Richmond County
2010036264 08/13/2010 15:06:19.00
$0.00 AFFIDAVIT
2010036264 Augusta - Richmond County

Cross Reference: Deed Book

Please Return To: James B. Wall
Burnside Wall LLP
PO Box 2125
Augusta, Georgia 30903

STATE OF GEORGIA

COUNTY OF RICHMOND

AFFIDAVIT UNDER HAZARDOUS SITE RESPONSE ACT

The undersigned, being duly sworn, states that he is an authorized representative of **AUGUSTA, GEORGIA,** a political subdivision of the State of Georgia, deposes and says on oath as follows:

(1) That AUGUSTA, GEORIGA is the fee simple owner of all that tract or parcel of land situated in Richmond County, Georgia, as being more fully described on Exhibit "A" attached hereto (the "Property").

2) That the Property has been listed on the Hazardous Site Inventory as needing corrective action.

(3) That in accordance with Rule 391-3-19-.08(2), Deponent gives notice:

> "This property has been listed on that state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning the property. This notice is provided in compliance with the Georgia Hazardous Site Response Act."

Book 01270:1529 Augusta - Richmond County
2010036264 08/13/2010 15:06:19.00

IN WITNESS WHEREOF, that Deke Copenhaver has executed this Affidavit this 12th day of August, 2010.

Signed, sealed and delivered in our presence in Richmond County, State of Georgia

Witness

Notary Public, County of Columbia, State of Georgia
My Commission Expires: 7-18-2014
(SEAL)

NANCY W. MORAWSKI NOTARY PUBLIC COLUMBIA COUNTY, GA Exp. July 18, 2014

AGM 8/10/10

By: Deke Copenhaver, Mayor

Attest:

Book 01270:1530 Augusta - Richmond County
2010036264 08/13/2010 15:06:19.00

Exhibit "A"

All that land situate, lying and being in the City of Augusta, Richmond County, Georgia, containing 0.49 acre of improved real property, lying and being in the 600th G.M. District, Augusta, Richmond County, Georgia, shown on a plat of survey entitled "Proposed Acquisition by the State of Georgia" by Charles T. Dillard, Georgia Registered Land Surveyor No. 1834, dated September 1, 1976, a copy of which is attached hereto, incorporated herein, and by this reference made a party hereof. Said Property being the same property conveyed by State of Georgia, acting by and through the State Properties Commission, to Augusta, Georgia, a political subdivision of the State of Georgia, by Quitclaim Deed recorded in Book 00937, Page 1638 being more particularly described therein.

Tax Map Parcel Number: 047-3-362-00-0

Filed in this office:
Augusta - Richmond County
08/13/2010 15:06:19.00
ELAINE C. JOHNSON
Clerk of Superior Court

Book 00937:1638 Augusta - Richmond County
2004032764 07/06/2004 14:35:00.00
$0.00 QUITCLAIM DEED
2004032764 Augusta - Richmond County

After Recording Return to:
James B. Wall
454 Greene Street
Augusta, GA 30901

RECORDED
STATE PROPERTIES COMMISSION
JUN 16 2004
009980
REAL PROPERTY RECORDS

5700-MA-03-1035399

STATE OF GEORGIA,
COUNTY OF RICHMOND:

QUITCLAIM DEED

THIS INDENTURE, hereinafter referred to as "Deed", is made this 15th day of June, 2004, by and between the **STATE OF GEORGIA**, acting by and through the State Properties Commission, whose address is One Martin Luther King, Jr., Dr., S.W., Suite 204, Atlanta, Georgia 30334, party of the first part, hereinafter called "Grantor," and AUGUSTA, GEORGIA, a political subdivision of the State of Georgia, acting by and through the Augusta-Richmond County Commission, whose address is 801 Municipal Building, Augusta, Georgia 30911, party of the second part, hereinafter called "Grantee," (the words "Grantor" and "Grantee" to include the plural and their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH THAT:

009980

WHEREAS, Grantor is the owner of approximately 0.49 acres of improved real property lying and being in the 600th G. M. District, Augusta, Richmond County, Georgia, (hereinafter the "Property"), more particularly described on Exhibit "A" attached hereto and incorporated herein; and

WHEREAS, the Property is under the custody and control of the Georgia Bureau of Investigation, but is no longer being used for its original purposes; and

WHEREAS, Grantee is desirous of acquiring the Property; and,

WHEREAS, by 2003 Resolution Act No. 194 (S.R. 121), approved May 31, 2003, the General Assembly declared that the State of Georgia is the owner of the Property and that in all matters relating to the conveyance of the Property the State Properties Commission may act on behalf of the State of Georgia; and,

WHEREAS, the General Assembly, in said Resolution Act, authorized the Property to be conveyed by appropriate instrument to Grantee for and in consideration of $1.00, and other such further consideration as determined by the State Properties Commission so long as the Property is used for public purposes; and,

WHEREAS, the State Properties Commission, at its duly called meeting on September 25, 2003, approved the conveyance of the Property as authorized by said Resolution Act; and,

WHEREAS, the Grantee has previously approved the conveyance herein in accordance with the terms authorized by the Grantor.

NOW, THEREFORE, Grantor, for and in consideration of the mutual public benefit, and other good and valuable consideration, in hand paid at and before the signing, sealing and delivery of these presents, the receipt and sufficiency of which is hereby acknowledged, does hereby remise, convey and forever quitclaim unto Grantee all of

000600

Grantor's right, title and interest in the Property, being more particularly described in Exhibit A, which is attached hereto, incorporated herein and by this reference made a part hereof.

The Property and any buildings, other structures or improvements, fixtures, and real and personal property situated on the Property, if any, herein conveyed are hereby conveyed by Grantor to Grantee upon an "AS IS" and "WHERE IS" basis. Neither Grantor nor any person or entity of any kind or nature whatsoever acting for or on behalf of Grantor either has made or hereby makes any representation or warranty whatsoever with respect thereto, whether express, implied or statutory, including without limitation any representation or warranty as to the condition of the Property.

TO HAVE AND TO HOLD the Property, with all and singular the rights, members and appurtenances thereof, to the same being, belonging or in anywise appertaining, to the only proper use, benefit and behoof of Grantee forever, without warranty of any type, kind or nature whatsoever, so long as the Property is used for public purposes.

IN WITNESS WHEREOF, Grantor, acting by and through its duly authorized officials, has caused this Deed to be signed, sealed and delivered in its name, all as of the day, month and year first above written.

(Signatures begin next page)

098600

GRANTOR:

STATE OF GEORGIA

Acting by and through the
State Properties Commission

By: Sonny Perdue (Seal)
GOVERNOR SONNY PERDUE,
As Chairman of the
State Properties Commission

Attest: J. Ray Crawford, Jr. (Seal)
J. Ray Crawford, Jr.
Executive Direc
State Properties

(Gr
Sta
Aff

(Comm
Affixed Her

Signed, sealed and delivered, as to Grantor,
in our presence:

Unofficial Witness

Official Witness, Notary Public

Notary Public, Henry County, Georgia
My Commission Expires July 25, 2004

My Commission Expires:

(Notary Public Seal Affixed Here)

086600

EXHIBIT "A"

Legal Description

All that tract of land situate, lying and being in the City of Augusta, Richmond County, Georgia, containing approximately 0.49 acres of improved real property, lying and being in the 600th G. M. District, Augusta, Richmond County, Georgia, shown on a plat of survey entitled "Proposed Acquisition by the State of Georgia" by Charles T. Dillard, Georgia Registered Land Surveyor No. 1834, dated September 1, 1976, a copy of which is attached hereto, incorporated herein, and by this reference made a part hereof. Said Property being the same property conveyed by the City Council of Augusta to the State of Georgia by Warranty Deed recorded in Reel No. 90 Pages 1572-1574 and being more particularly described therein.

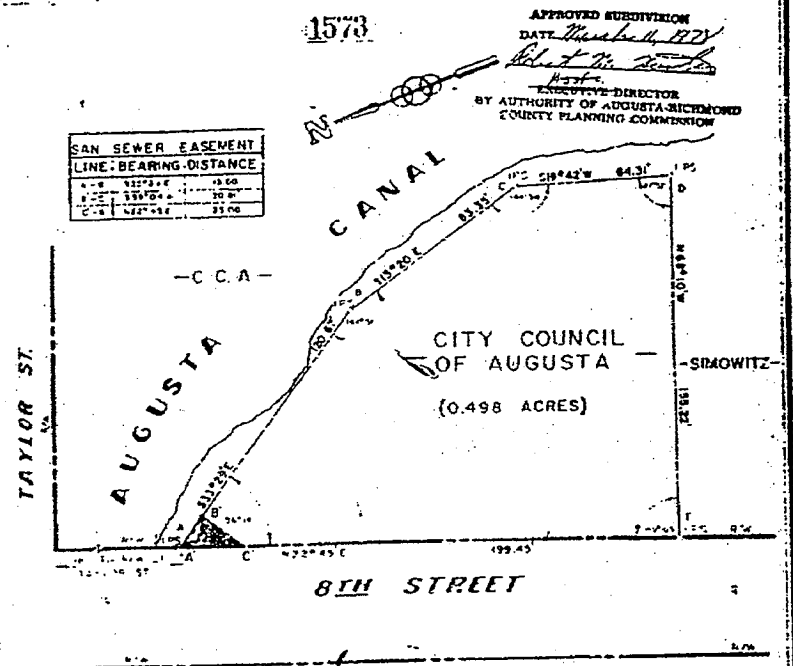
098600

Book 00937:1643 Augusta - Richmond County
2004032764 07/06/2004 14:35:00.00

REALTY
REEL
NO. 90

1573

APPROVED SUBDIVISION
DATE March 14, 1977
Robert M. Brown
Mayor
EXECUTIVE DIRECTOR
BY AUTHORITY OF AUGUSTA-RICHMOND
COUNTY PLANNING COMMISSION



PROPOSED ACQUISITION BY THE STATE OF GEORGIA

CERTIFICATE OF SURVEYOR

I HEREBY CERTIFY (A) THAT THIS PLAT OF SURVEY IS AN ACCURATE, COMPLETE, AND CORRECT REPRESENTATION OF THE LAND PLATTED AND HAS BEEN PREPARED IN CONFORMITY WITH THE MINIMUM STANDARDS AND REQUIREMENTS OF LAW; (B) THAT IT IS COMPLETE AS TO BOTH DIRECTIONS AND DIMENSIONS; (C) THAT IT GIVES ACCURATE COURSES AND DISTANCES OF ALL SIDES; (D) THAT IT SHOWS ALL INTERIOR ANGLES; (E) THAT IT SHOWS ACCURATELY ALL PHYSICAL OBJECTS LOCATED WITHIN ITS BOUNDARIES INCLUDING, BUT NOT LIMITED TO, BUILDINGS, STRUCTURES, FENCES, WALLS, DRIVEWAYS, PARKING AREAS, UTILITY LINES (INCLUDING APPURTENANCES USED IN CONNECTION THEREWITH), STREAMS AND SPRINGS AND ALSO ALL VISIBLE INDICIA OF USE OF ANY PORTION OF THE PLATTED PROPERTY AS A MEANS OF ACCESS TO ADJOINING PROPERTY (ROADWAYS, ALLEYS, DRIVEWAYS, ETC); (F) THAT IT SHOWS ACCURATELY ALL ENCROACHMENTS ONTO AND FROM THE PLATTED PROPERTY WHICH DO OR MIGHT AFFECT THE TITLE OR USE OF THE PLATTED PROPERTY; (G) THAT ALL CORNERS OF SAID PLATTED PROPERTY HAVE BEEN ESTABLISHED BY IRON PINS; (H) THAT ALL COURSES ARE REFERENCED TO "MAGNETIC NORTH" WITH SUITABLE NOTATION AT THE NORTH ARROW; (I) THAT THE PLATTED PROPERTY IS TIED INTO A POINT CONSIDERED REASONABLY PERMANENT BY A SUITABLE TRAVERSE SHOWING ACCURATE COURSES, DISTANCES, AND INTERIOR ANGLES; (J) THAT A CLOSURE SHEET ACCOMPANIES THIS PLAT OF SURVEY ON WHICH CLOSURE SHEET THE ERROR OF CLOSURE IS REFLECTED; (K) THAT A CORRECT AND COMPLETE METES AND BOUNDS LEGAL DESCRIPTION ACCOMPANIES (ON A SEPERATE SHEET) THIS PLAT OF SURVEY; (L) THAT THE LAND AREA SHOWN HEREON AND EXPRESSED IN ACREAGE AND/OR SQUARE FOOTAGE HAS BEEN COMPUTED BY THE DOUBLE MERIDIAN METHOD AND (M) THAT THIS PLAT OF SURVEY IS DATED AND ALL REVISION DATES OF THIS PLAT OF SURVEY ARE SHOWN HEREON

THIS 1ST DAY OF SEPTEMBER, 1976

Charles T. Dillard
GA R.L.S. 1634

Filed in this office:
Augusta - Richmond County
07/06/2004 14:35:00.00
Elaine C. Johnson
Clerk of Superior Court

008600

ATTACHMENT A

OSWER VAPOR INTRUSION ASSESSMENT
Vapor Intrusion Screening Level (VISL) Calculator Version 3.3, May 2014 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Residential	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-05	Enter target risk for carcinogens
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens
Average Groundwater Temperature (°C)	Tgw	18.6	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

	CAS	Chemical Name	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source?	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source?	Target Indoor Air Conc. @ TCR = 10E-06 or THQ = 1	Toxicity Basis	Target Sub-Slab and Exterior Soil Gas Conc. @ TCR = 10E-06 or THQ = 1	Target Ground Water Conc. @ TCR = 10E-06 or THQ = 1	Is Target Ground Water Conc. < MCL?	Temperature for Groundwater Vapor Conc.	Lower Explosive Limit**	LEL Source	Inhalation Unit Risk	IUR Source*	Reference Concentration	RFC Source*	Mutagenic Indicator	Target Indoor Air Conc. for Carcinogens @ TCR = 10E-06	Target Indoor Air Conc. for Non-Carcinogens @ THQ = 1
			Cvp > Cia,target?	Chc > Cia,target?	MIN(Cia,c;Cia,nc)		Csg	Cgw	Cgw<MCL?	Tgw or 25	LEL		IUR		RfC		i	Cia,c	Cia,nc
	CAS	Chemical Name	Yes/No	Yes/No	(ug/m^3)	C/NC	(ug/m^3)	(ug/L)	Yes/No (MCL ug/L)	C	(% by vol)		(ug/m^3)$^{-1}$		(mg/m^3)			(ug/m^3)	(ug/m^3)
x	71-43-2	Benzene	Yes	Yes	3.1E+00	C	3.1E+01	19	No (5)	18.6	1.2	N	7.80E-06	I	3.00E-02	I		3.1E+00	3.1E+01
x	100-41-4	Ethylbenzene	Yes	Yes	9.7E+00	C	9.7E+01	44	Yes (700)	18.6	0.8	N	2.50E-06	CA	1.00E+00	I		9.7E+00	1.0E+03
x	91-20-3	Naphthalene	Yes	Yes	7.2E-01	C	7.2E+00	64	--	18.6	0.9	N	3.40E-05	CA	3.00E-03	I		7.2E-01	3.1E+00
x	108-88-3	Toluene	Yes	Yes	5.2E+03	NC	5.2E+04	26878	No (1000)	18.6	1.1	N			5.00E+00	I			5.2E+03
x	79-01-6	Trichloroethylene	Yes	Yes	2.1E+00	NC	2.1E+01	7.1	No (5)	18.6	8	N	see note	I	2.00E-03	I	TCE	4.4E+00	2.1E+00
x	1330-20-7	Xylenes	Yes	Yes	1.0E+02	NC	1.0E+03	717	Yes (10000)	18.6					1.00E-01	I			1.0E+02

Notes:

(1) **Inhalation Pathway Exposure Parameters (RME):**

Exposure Scenario	Units	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell E5) Symbol	Selected (based on scenario in cell E5) Value
Averaging time for carcinogens	(yrs)	ATc_R	70	ATc_C	70	ATc	70
Averaging time for non-carcinogens	(yrs)	ATnc_R	30	ATnc_C	25	ATnc	30
Exposure duration	(yrs)	ED_R	30	ED_C	25	ED	30
Exposure frequency	(days/yr)	EF_R	350	EF_C	250	EF	350
Exposure time	(hr/day)	ET_R	24	ET_C	8	ET	24

(2) **Generic Attenuation Factors:**

Source Medium of Vapors	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell E5) Symbol	Selected (based on scenario in cell E5) Value
Groundwater	AFgw_R	1.00E-03	AFgw_C	0.001	AFgw	0.001
Sub-Slab and Exterior Soil Gas	AFss_R	0.1	AFss_C	0.1	AFss	0.1

(3) **Formulas**

Cia, target = MIN(Cia,c; Cia,nc)
Cia,c (ug/m3) = TCR x ATc x (365 days/yr) x (24 hrs/day) / (ED x EF x ET x IUR)
Cia,nc (ug/m3) = THQ x ATnc x (365 days/yr) x (24 hrs/day) x RfC x (1000 ug/mg) / (ED x EF x ET)

(4) **Special Case Chemicals**

Trichloroethylene

	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell E5) Symbol	Selected (based on scenario in cell E5) Value
	mIURTCE_R	1.00E-06	mIURTCE_C	0.00E+00	mIURTCE	1.00E-06
	IURTCE_R	3.10E-06	IURTCE_C	4.10E-06	IURTCE	3.10E-06

Mutagenic Chemicals — The exposure durations and age-dependent adjustment factors for mutagenic-mode-of-action are listed in the table below:

Note: This section applies to trichloroethylene and other mutagenic chemicals, but not to vinyl chloride.

Age Cohort	Exposure Duration (years)	Age-dependent adjustment factor
0 - 2 years	2	10
2 - 6 years	4	3
6 - 16 years	10	3
16 - 26 years	10	1

Mutagenic-mode-of-action (MMOA) adjustment factor 72 This factor is used in the equations for mutagenic chemicals.

Vinyl Chloride — See the Navigation Guide equation for Cia,c for vinyl chloride.

Notation:

NVT = Not sufficiently volatile and/or toxic to pose inhalation risk in selected exposure scenario for the indicated medium
C = Carcinogenic
NC = Non-carcinogenic
I = IRIS: EPA Integrated Risk Information System (IRIS). Available online at: http://www.epa.gov/iris/subst/index.html
P = PPRTV. EPA Provisional Peer Reviewed Toxicity Values (PPRTVs). Available online at: http://hhpprtv.ornl.gov/pprtv.shtml
A = Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Levels (MRLs). Available online at: http://www.atsdr.cdc.gov/mrls/index.html
CA = California Environmental Protection Agency/Office of Environmental Health Hazard Assessment assessments. Available online at:
H = HEAST. EPA Superfund Health Effects Assessment Summary Tables (HEAST) database. Available online at: http://epa-heast.ornl.gov/heast.shtml
S = See RSL User Guide, Section 5
X = PPRTV Appendix
E = The Engineering ToolBox. Available online at http://www.engineeringtoolbox.com/explosive-concentration-limits-d_423.html
N = Centers for Disease Control and Prevention (CDC) National Institute for Occupational Safety and Health (NIOSH). Pocket Guide to Chemical Hazards. Available online at: http://www.cdc.gov/niosh/npg/default.html
M = Chemical-specific MSDS
Mut = Chemical acts according to the mutagenic-mode-of-action, special exposure parameters apply (see footnote (4) above).
VC = Special exposure equation for vinyl chloride applies (see Navigation Guide for equation).
TCE = Special mutagenic and non-mutagenic IURs for trichloroethylene apply (see footnote (4) above).
Yellow highlighting indicates site-specific parameters that may be edited by the user.
Blue highlighting indicates exposure factors that are based on Risk Assessment Guidance for Superfund (RAGS) or EPA vapor intrusion guidance, which generally should not be changed.
**Lower explosive limit is the minimum concentration of the compound in air (% by volume) that is needed for the gas to ignite and explode.

Chemical Properties for Supporting the VISL

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG
3			**Molecular Weight**		**Vapor Pressure**		**Pure Component Water Solubility**		**MCL**	**Henry's Law Constant @25°C**		**Henry's Law Constant @25°C[g]**	**Henry's Law Constant @ Tgw[a]**	**Henry's Law Constant Used in Calcs**	**Henry's Law Constant @ Tgw_GW[a]**	**Henry's Law Constant Used in Calcs for GW-IA_calc**	**Vapor Pressure @ Tgw[a]**	**Diffusivity in air[m]**		**Diffusivity in water[m]**		**Normal Boiling Point**		**Critical Temperature**		**Enthalpy of vaporization at the normal boiling point**		**Organic Carbon Partition Coefficient[m]**		**Lower Explosive Limit**		
4			MW		VP		S			Hc25		H'25	H'Tgw		H'Tgw_GW	HLC_GW	VPTgw	Da		Dw		Tboil		Tcrit		DH_{v_b}		Koc		LEL			
5	**CAS**	**Alphabetized List of Compounds**	(g/mole)	source	(mm Hg)	source	(mg/L)	source	(ug/L)	(atm-m^3/mol)	source	(unitless)	(unitless)	(unitless)	(unitless)	(unitless)	(ug/m3)	(cm^2/s)	source	(cm^2/s)	source	(^{o}K)	source	(^{o}K)	source	(cal/mol)	source	(cm^3/g)	source	(% by vol)	source		**Alternative Chemical Name 1**
17	71-43-2	Benzene	78.11	a	9.48E+01	b	1.79E+03	a	5	5.55E-03	a	2.27E-01	1.68E-01	1.68E-01	1.68E-01	1.68E-01	2.96E+08	8.95E-02	a	1.03E-05	a	3.53E+02	b	5.62E+02	h	7.34E+03	h	1.46E+02	a	1.2	N		
68	100-41-4	Ethylbenzene	106.17	a	9.60E+00	b	1.69E+02	a	700	7.88E-03	a	3.22E-01	2.22E-01	2.22E-01	2.22E-01	2.22E-01	3.78E+07	6.85E-02	a	8.46E-06	a	4.09E+02	b	6.17E+02	h	8.50E+03	h	4.46E+02	a	0.8	N		
86	91-20-3	Naphthalene	128.18	a	8.50E-02	b	3.10E+01	a		4.40E-04	a	1.80E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	3.65E+05	6.05E-02	a	8.38E-06	a	4.91E+02	b	7.48E+02	h	1.04E+04	h	1.54E+03	a	0.9	N		
104	108-88-3	Toluene	92.14	a	2.84E+01	b	5.26E+02	a	1000	6.64E-03	a	2.71E-01	1.94E-01	1.94E-01	1.94E-01	1.94E-01	1.01E+08	7.78E-02	a	9.20E-06	a	3.84E+02	b	5.92E+02	h	7.93E+03	h	2.34E+02	a	1.1	N		
109	79-01-6	Trichloroethylene	131.39	a	6.90E+01	b	1.28E+03	a	5	9.85E-03	a	4.03E-01	2.94E-01	2.94E-01	2.94E-01	2.94E-01	3.57E+08	6.87E-02	a	1.02E-05	a	3.60E+02	b	5.44E+02	h	7.51E+03	h	6.07E+01	a	8	N		
122	1330-20-7	Xylenes	106.17	a	8.37E+00	s	1.06E+02	a	10000	5.18E-03	a	2.12E-01	1.45E-01	1.45E-01	1.45E-01	1.45E-01	3.28E+07	8.47E-02	a	9.90E-06	a	4.11E+02	b	6.16E+02	h	8.52E+03	h	3.83E+02	a				Xylene, Mixture

NOTE: Values not currently included in the chemical parameter Regional screening table (see footnote a) were derived following the hierarchy outlined in the Regional Screening Tables User's Guide.
Available online at: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/usersguide.htm

a Based on values reported in the U.S. EPA Regional Screening Tables. May 2014.
Available online at: www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

b Experimental values. USEPA 2009. Estimation Programs Interface Suite™ for Microsoft® Windows, v 4.00. United States Environmental Protection Agency, Washington, DC, USA.
Available online at: http://www.epa.gov/opptintr/exposure/pubs/episuite.htm

c USEPA 1996. Soil Screening Guidance. Attachment C: Chemical Properties for SSL Development. EPA540/R-96/018. July, 1996.

d USEPA 2001. USEPA WATER9, Version 2.0. United States Environmental Protection Agency, Research Triangle Park, NC, USA.
Available online at: http://www.epa.gov/ttn/chief/software/water/index.html

e Syracuse Research Corporation (SRC). 2005. PHYSPROP Database. SRC. Syracuse, NY.
Available online at: http://www.syrres.com/what-we-do/databaseforms.aspx?id=386

f CRC Handbook of Chemistry and Physics, 76th Edition

g National Institute of Standards and Technology (NIST). Chemistry WebBook.
Available online at: http://webbook.nist.gov/chemistry/

h USEPA, 2001. FACT SHEET Correcting the Henry's Law Constant for Soil Temperature. Attachment.

j Weast, Robert C. CRC Handbook of Chemistry and Physics 1984-1985, 65th edition. Pages F-62 through F-64.

k McKay, D., et al. Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals. Second Edition.

kk Chemical-specific MSDS

m These properties are not used for any calculations in the spreadsheet, but are included to maintain consistency with other spreadsheet tools that do use these properties.

mm The Merck Index, 10th Edition

n United States National Library of Medicine. National Institutes of Health. TOXNET Toxicology Data Network.
Available online at: http://toxnet.nlm.nih.gov/

nn Weiss, G. Hazardous Chemicals Data Book, Second Edition, Noyes Data Corporation, 1986.

p DECHEMA Web Database, March 2003.

q No chemical property information available for this chemical, although toxicity data are available.

r California Environmental Protection Agency. Consumer Products Solvents Database. Entry for "Aromatic 150". 2004.
Available online at: http://www.arb.ca.gov/db/solvents/solvents.htm

s Calculated as average of m-xylene, o-xylene, and p-xylene isomers.

v Approximated using Tcrit = 1.5 x Tboil.

Note the "c" at the end of some sources indicates that the value presented in the table is converted from the value included in the reference source.

Values not currently included in the chemical parameter Regional screening table (see footnote a) were derived following the hierarchy outlined in the Regional Screening Tables User's Guide.
Available online at: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/usersguide.htm

Based on values reported in the U.S. EPA Regional Screening Tables. May 2014.
Available online at: www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

Experimental values. USEPA 2009. Estimation Programs Interface Suite™ for Microsoft® Windows, v 4.00. United States Environmental Protection Agency, Washington, DC, USA.
Available online at: http://www.epa.gov/opptintr/exposure/pubs/episuite.htm

USEPA 1996. Soil Screening Guidance. Attachment C: Chemical Properties for SSL Development. EPA540/R-96/018. July, 1996.

USEPA 2001. USEPA WATER9, Version 2.0. United States Environmental Protection Agency, Research Triangle Park, NC, USA.
Available online at: http://www.epa.gov/ttn/chief/software/water/index.html

Syracuse Research Corporation (SRC). 2005. PHYSPROP Database. SRC. Syracuse, NY.
Available online at: http://www.syrres.com/what-we-do/databaseforms.aspx?id=386

CRC Handbook of Chemistry and Physics, 76th Edition

National Institute of Standards and Technology (NIST). Chemistry WebBook.
Available online at: http://webbook.nist.gov/chemistry/

USEPA, 2001. FACT SHEET Correcting the Henry's Law Constant for Soil Temperature. Attachment.

Weast, Robert C. CRC Handbook of Chemistry and Physics 1984-1985, 65th edition. Pages F-62 through F-64.

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Chemical-specific MSDS

These properties are not used for any calculations in the spreadsheet, but are included to maintain consistency with other spreadsheet tools that do use these properties.

The Merck Index, 10th Edition

United States National Library of Medicine. National Institutes of Health. TOXNET Toxicology Data Network.
Available online at: http://toxnet.nlm.nih.gov/

Weiss, G. Hazardous Chemicals Data Book, Second Edition, Noyes Data Corporation, 1986.

DECHEMA Web Database, March 2003.

No chemical property information available for this chemical, although toxicity data are available.

California Environmental Protection Agency. Consumer Products Solvents Database. Entry for "Aromatic 150". 2004.
Available online at: http://www.arb.ca.gov/db/solvents/solvents.htm

Calculated as average of m-xylene, o-xylene, and p-xylene isomers.

Approximated using Tcrit = 1.5 x Tboil.

Note the "c" at the end of some sources indicates that the value presented in the table is converted from the value included in the reference source.

ATTACHMENT B

Attachment B-1

Event	Well	Benzene	D_Benz	Ethylbenzene	D_Ethyl	Naphthalene	D_Napl	Toluene	D_Tolue	TCE	D_TCE	Xylenes	D_Xyler
Jul-13	MW-12	1900	1	540	1	0.5	0	200	1	5	0	350	1
Jul-13	MW-304	76	1	28	1	280	1	5	0	5	0	29	1
Jul-13	MW-311	5	0	5	0	5.5	1	5	0	5	0	5	0
Jul-13	MW-401SAP	5	0	5	0	5	0	5	0	27	1	5	0
Jul-13	MW-401D	5	0	5	0	0.95	1	5	0	41	1	5	0
Jul-13	MW-505D	5	0	64	1	870	1	5	0	5	0	43	1
Jul-13	MW-600	7000	1	990	1	5300	1	2900	1	250	0	2100	1
Jul-13	MW-601	18000	1	1000	1	9900	1	8700	1	250	0	3400	1
Jul-13	MW-603	5	0	74	1	490	1	5	0	5	0	39	1
Jan-14	MW-12	2200	1	720	1	3800	1	330	1	5	0	530	1
Jan-14	MW-205	3100	1	360	1	1300	1	99	1	5	0	250	1
Jan-14	MW-304	27	1	12	1	65	1	5	0	5	0	26	1
Jan-14	MW-311	14	1	5	0	12	1	5	0	5	0	5	0
Jan-14	MW-401SAP	5	0	5	0	0.5	0	5	0	25	1	5	0
Jan-14	MW-401D	5	0	5	0	0.69	1	5	0	41	1	5	0
Jan-14	MW-502D	450	1	1600	1	4900	1	69	1	5	0	1100	1
Jan-14	MW-505D	5	0	67	1	840	1	5	0	5	0	59	1
Jan-14	MW-600	20000	1	2400	1	7700	1	12000	1	250	0	3700	1
Jan-14	MW-601	18000	1	1300	1	8400	1	6100	1	500	0	2500	1
Jul-14	MW-12	5700	1	1700	1	6200	1	680	1	100	0	1300	1
Jul-14	MW-205	1100	1	170	1	390	1	77	1	5	0	220	1
Jul-14	MW-304	91	1	5	0	12	1	5	0	5	0	5	0
Jul-14	MW-311	21	1	5	0	12	1	5	0	5	0	5	0
Jul-14	MW-401SAP	5	0	5	0	0.6	1	5	0	23	1	5	0
Jul-14	MW-401D	5	0	5	0	0.5	0	5	0	27	1	5	0
Jul-14	MW-505D	5	0	34	1	590	1	5	0	5	0	14	1
Jul-14	MW-600	25000	1	2500	0	10000	1	17000	1	2500	0	4600	1
Jul-14	MW-601	31000	1	1600	1	8700	1	16000	1	500	0	4200	1
Jan-15	MW-12	3500	1	930	1	3700	1	720	1	5	0	940	1
Jan-15	MW-304	27	1	5	0	27	1	5	0	5	0	5	0
Jan-15	MW-311	370	1	94	1	560	1	9.6	1	5	0	41	1
Jan-15	MW-401SAP	5	0	5	0	0.5	0	5	0	9.7	1	5	0
Jan-15	MW-401D	5	0	5	0	5.1	1	5	0	18	1	5	0
Jan-15	MW-505D	5	0	13	1	4.2	1	5	0	5	0	6.8	1
Jan-15	MW-600	25000	1	2500	0	5400	1	8500	1	2500	0	2600	1
Jan-15	MW-601	6900	1	960	1	6500	1	2100	1	500	0	1900	1

Attachment B-2

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	3/31/2015 4:10:52 PM
From File	UCL_Input_3.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Benzene

General Statistics

Total Number of Observations	36	Number of Distinct Observations	20
Number of Detects	22	Number of Non-Detects	14
Number of Distinct Detects	19	Number of Distinct Non-Detects	1
Minimum Detect	14	Minimum Non-Detect	5
Maximum Detect	31000	Maximum Non-Detect	5
Variance Detects	1.007E+8	Percent Non-Detects	38.89%
Mean Detects	7703	SD Detects	10034
Median Detects	2650	CV Detects	1.303
Skewness Detects	1.179	Kurtosis Detects	-0.0418
Mean of Logged Detects	7.183	SD of Logged Detects	2.621

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.765	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.911	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.255	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.189	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	4710	Standard Error of Mean	1456
SD	8533	95% KM (BCA) UCL	7204
95% KM (t) UCL	7169	95% KM (Percentile Bootstrap) UCL	7217
95% KM (z) UCL	7104	95% KM Bootstrap t UCL	7945
90% KM Chebyshev UCL	9077	95% KM Chebyshev UCL	11055
97.5% KM Chebyshev UCL	13800	99% KM Chebyshev UCL	19194

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.503	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.831	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.141	**Kolmogrov-Smirnoff GOF**	
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.376	k star (bias corrected MLE)	0.355
Theta hat (MLE)	20476	Theta star (bias corrected MLE)	21687
nu hat (MLE)	16.55	nu star (bias corrected)	15.63
MLE Mean (bias corrected)	7703	MLE Sd (bias corrected)	12925

Gamma Kaplan-Meier (KM) Statistics

k hat (KM)	0.305	nu hat (KM)	21.93
Approximate Chi Square Value (21.93, α)	12.29	Adjusted Chi Square Value (21.93, β)	11.96
95% Gamma Approximate KM-UCL (use when n>=50)	8406	95% Gamma Adjusted KM-UCL (use when n<50)	8637

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detected data is small such as < 0.1

For such situations, GROS method tends to yield inflated values of UCLs and BTVs

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	4708
Maximum	31000	Median	51.5
SD	8656	CV	1.839
k hat (MLE)	0.133	k star (bias corrected MLE)	0.141
Theta hat (MLE)	35287	Theta star (bias corrected MLE)	33433
nu hat (MLE)	9.605	nu star (bias corrected)	10.14
MLE Mean (bias corrected)	4708	MLE Sd (bias corrected)	12546
		Adjusted Level of Significance (β)	0.0428
Approximate Chi Square Value (10.14, α)	4.028	Adjusted Chi Square Value (10.14, β)	3.854
95% Gamma Approximate UCL (use when n>=50)	11848	95% Gamma Adjusted UCL (use when n<50)	12383

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.896	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.911	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.147	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.189	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	4711	Mean in Log Scale	4.737
SD in Original Scale	8654	SD in Log Scale	3.895
95% t UCL (assumes normality of ROS data)	7147	95% Percentile Bootstrap UCL	7235
95% BCA Bootstrap UCL	7676	95% Bootstrap t UCL	7885
95% H-UCL (Log ROS)	17929974		

UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed

KM Mean (logged)	5.015	95% H-UCL (KM -Log)	1239881
KM SD (logged)	3.375	95% Critical H Value (KM-Log)	5.822
KM Standard Error of Mean (logged)	0.576		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	4709	Mean in Log Scale	4.746
SD in Original Scale	8655	SD in Log Scale	3.704
95% t UCL (Assumes normality)	7146	95% H-Stat UCL	5825163

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (BCA) UCL	7204	95% GROS Adjusted Gamma UCL	12383
95% Adjusted Gamma KM-UCL	8637		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Ethylbenzene

General Statistics

Total Number of Observations	36	Number of Distinct Observations	22
Number of Detects	21	Number of Non-Detects	15
Number of Distinct Detects	20	Number of Distinct Non-Detects	2
Minimum Detect	12	Minimum Non-Detect	5
Maximum Detect	2400	Maximum Non-Detect	2500
Variance Detects	499588	Percent Non-Detects	41.67%
Mean Detects	697.9	SD Detects	706.8
Median Detects	540	CV Detects	1.013
Skewness Detects	0.831	Kurtosis Detects	-0.149
Mean of Logged Detects	5.603	SD of Logged Detects	1.737

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.87	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.908	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.201	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.193	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	433	Standard Error of Mean	112.1
SD	638.2	95% KM (BCA) UCL	635.9
95% KM (t) UCL	622.5	95% KM (Percentile Bootstrap) UCL	622.5
95% KM (z) UCL	617.4	95% KM Bootstrap t UCL	657.5
90% KM Chebyshev UCL	769.4	95% KM Chebyshev UCL	921.8
97.5% KM Chebyshev UCL	1133	99% KM Chebyshev UCL	1549

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.72	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.792	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.172	**Kolmogrov-Smirnoff GOF**	
5% K-S Critical Value	0.198	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.647	k star (bias corrected MLE)	0.586
Theta hat (MLE)	1079	Theta star (bias corrected MLE)	1191
nu hat (MLE)	27.17	nu star (bias corrected)	24.62
MLE Mean (bias corrected)	697.9	MLE Sd (bias corrected)	911.6

Gamma Kaplan-Meier (KM) Statistics

k hat (KM)	0.46	nu hat (KM)	33.14
Approximate Chi Square Value (33.14, α)	20.98	Adjusted Chi Square Value (33.14, β)	20.54
95% Gamma Approximate KM-UCL (use when n>=50)	684	95% Gamma Adjusted KM-UCL (use when n<50)	698.6

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detected data is small such as < 0.1

For such situations, GROS method tends to yield inflated values of UCLs and BTVs

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	418.7
Maximum	2400	Median	49
SD	634.3	CV	1.515
k hat (MLE)	0.172	k star (bias corrected MLE)	0.176
Theta hat (MLE)	2441	Theta star (bias corrected MLE)	2382
nu hat (MLE)	12.35	nu star (bias corrected)	12.66
MLE Mean (bias corrected)	418.7	MLE Sd (bias corrected)	998.7
		Adjusted Level of Significance (β)	0.0428
Approximate Chi Square Value (12.66, α)	5.662	Adjusted Chi Square Value (12.66, β)	5.45
95% Gamma Approximate UCL (use when n>=50)	935.9	95% Gamma Adjusted UCL (use when n<50)	972.4

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.895	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.908	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.189	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.193	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	415.2	Mean in Log Scale	4.021
SD in Original Scale	633.5	SD in Log Scale	2.504
95% t UCL (assumes normality of ROS data)	593.6	95% Percentile Bootstrap UCL	589
95% BCA Bootstrap UCL	618	95% Bootstrap t UCL	622.6
95% H-UCL (Log ROS)	8500		

UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed

KM Mean (logged)	4.076	95% H-UCL (KM -Log)	5090
KM SD (logged)	2.354	95% Critical H Value (KM-Log)	4.241
KM Standard Error of Mean (logged)	0.414		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	477.5	Mean in Log Scale	3.996
SD in Original Scale	657.7	SD in Log Scale	2.713
95% t UCL (Assumes normality)	662.7	95% H-Stat UCL	19356

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (BCA) UCL	635.9	95% GROS Adjusted Gamma UCL	972.4
95% Adjusted Gamma KM-UCL	698.6		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Naphthalene

General Statistics

Total Number of Observations	36	Number of Distinct Observations	31
Number of Detects	31	Number of Non-Detects	5
Number of Distinct Detects	29	Number of Distinct Non-Detects	2
Minimum Detect	0.6	Minimum Non-Detect	0.5
Maximum Detect	10000	Maximum Non-Detect	5
Variance Detects	11984452	Percent Non-Detects	13.89%
Mean Detects	2773	SD Detects	3462
Median Detects	590	CV Detects	1.248
Skewness Detects	0.921	Kurtosis Detects	-0.663
Mean of Logged Detects	5.646	SD of Logged Detects	3.253

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.772	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.929	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.289	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.159	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	2388	Standard Error of Mean	559.5
SD	3302	95% KM (BCA) UCL	3249
95% KM (t) UCL	3333	95% KM (Percentile Bootstrap) UCL	3342
95% KM (z) UCL	3308	95% KM Bootstrap t UCL	3563
90% KM Chebyshev UCL	4067	95% KM Chebyshev UCL	4827
97.5% KM Chebyshev UCL	5882	99% KM Chebyshev UCL	7955

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.99	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.854	Detected Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.163	**Kolmogrov-Smirnoff GOF**	
5% K-S Critical Value	0.171	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.302	k star (bias corrected MLE)	0.294
Theta hat (MLE)	9184	Theta star (bias corrected MLE)	9425
nu hat (MLE)	18.72	nu star (bias corrected)	18.24
MLE Mean (bias corrected)	2773	MLE Sd (bias corrected)	5112

Gamma Kaplan-Meier (KM) Statistics

k hat (KM)	0.523	nu hat (KM)	37.65
Approximate Chi Square Value (37.65, α)	24.6	Adjusted Chi Square Value (37.65, β)	24.12
95% Gamma Approximate KM-UCL (use when n>=50)	3655	95% Gamma Adjusted KM-UCL (use when n<50)	3728

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detected data is small such as < 0.1

For such situations, GROS method tends to yield inflated values of UCLs and BTVs

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.6	Mean	2462
Maximum	10000	Median	536.5
SD	3300	CV	1.34
k hat (MLE)	0.328	k star (bias corrected MLE)	0.319
Theta hat (MLE)	7513	Theta star (bias corrected MLE)	7721
nu hat (MLE)	23.59	nu star (bias corrected)	22.96
MLE Mean (bias corrected)	2462	MLE Sd (bias corrected)	4360
		Adjusted Level of Significance (β)	0.0428
Approximate Chi Square Value (22.96, α)	13.06	Adjusted Chi Square Value (22.96, β)	12.72
95% Gamma Approximate UCL (use when n>=50)	4328	95% Gamma Adjusted UCL (use when n<50)	4444

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.87	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.929	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.172	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.159	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	2388	Mean in Log Scale	4.702
SD in Original Scale	3349	SD in Log Scale	3.864
95% t UCL (assumes normality of ROS data)	3331	95% Percentile Bootstrap UCL	3361
95% BCA Bootstrap UCL	3495	95% Bootstrap t UCL	3521
95% H-UCL (Log ROS)	14314800		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	2388	Mean in Log Scale	4.734
SD in Original Scale	3349	SD in Log Scale	3.808
95% t UCL (Assumes normality)	3331	95% H-Stat UCL	10587468

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	4827	95% GROS Adjusted Gamma UCL	4444
95% Adjusted Gamma KM-UCL	3728		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Toluene

General Statistics

Total Number of Observations	36	Number of Distinct Observations	17
Number of Detects	16	Number of Non-Detects	20
Number of Distinct Detects	16	Number of Distinct Non-Detects	1
Minimum Detect	9.6	Minimum Non-Detect	5
Maximum Detect	17000	Maximum Non-Detect	5
Variance Detects	35466665	Percent Non-Detects	55.56%
Mean Detects	4718	SD Detects	5955
Median Detects	1410	CV Detects	1.262
Skewness Detects	1.104	Kurtosis Detects	-0.107
Mean of Logged Detects	6.932	SD of Logged Detects	2.321

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.786	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.249	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.222	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	2100	Standard Error of Mean	774.8
SD	4501	95% KM (BCA) UCL	3532
95% KM (t) UCL	3409	95% KM (Percentile Bootstrap) UCL	3397
95% KM (z) UCL	3374	95% KM Bootstrap t UCL	4000
90% KM Chebyshev UCL	4424	95% KM Chebyshev UCL	5477
97.5% KM Chebyshev UCL	6938	99% KM Chebyshev UCL	9809

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.443	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.812	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.155	**Kolmogrov-Smirnoff GOF**	
5% K-S Critical Value	0.229	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.426	k star (bias corrected MLE)	0.388
Theta hat (MLE)	11065	Theta star (bias corrected MLE)	12156
nu hat (MLE)	13.64	nu star (bias corrected)	12.42
MLE Mean (bias corrected)	4718	MLE Sd (bias corrected)	7573

Gamma Kaplan-Meier (KM) Statistics

k hat (KM)	0.218	nu hat (KM)	15.66
Approximate Chi Square Value (15.66, α)	7.726	Adjusted Chi Square Value (15.66, β)	7.473
95% Gamma Approximate KM-UCL (use when n>=50)	4257	95% Gamma Adjusted KM-UCL (use when n<50)	4401

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detected data is small such as < 0.1

For such situations, GROS method tends to yield inflated values of UCLs and BTVs

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	2097
Maximum	17000	Median	0.01
SD	4566	CV	2.178
k hat (MLE)	0.112	k star (bias corrected MLE)	0.121
Theta hat (MLE)	18675	Theta star (bias corrected MLE)	17266
nu hat (MLE)	8.084	nu star (bias corrected)	8.744
MLE Mean (bias corrected)	2097	MLE Sd (bias corrected)	6017
		Adjusted Level of Significance (β)	0.0428
Approximate Chi Square Value (8.74, α)	3.173	Adjusted Chi Square Value (8.74, β)	3.022
95% Gamma Approximate UCL (use when n>=50)	5778	95% Gamma Adjusted UCL (use when n<50)	6067

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.927	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.154	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.222	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	2101	Mean in Log Scale	3.307
SD in Original Scale	4565	SD in Log Scale	4.028
95% t UCL (assumes normality of ROS data)	3386	95% Percentile Bootstrap UCL	3410
95% BCA Bootstrap UCL	3756	95% Bootstrap t UCL	4180
95% H-UCL (Log ROS)	9739935		

UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed

KM Mean (logged)	3.975	95% H-UCL (KM -Log)	82049
KM SD (logged)	3.04	95% Critical H Value (KM-Log)	5.296
KM Standard Error of Mean (logged)	0.523		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	2098	Mean in Log Scale	3.59
SD in Original Scale	4566	SD in Log Scale	3.391
95% t UCL (Assumes normality)	3384	95% H-Stat UCL	324697

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	3409	95% GROS Adjusted Gamma UCL	6067
95% Adjusted Gamma KM-UCL	4401		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TCE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	11
Number of Detects	8	Number of Non-Detects	28
Number of Distinct Detects	6	Number of Distinct Non-Detects	5
Minimum Detect	9.7	Minimum Non-Detect	5
Maximum Detect	41	Maximum Non-Detect	2500
Variance Detects	112.9	Percent Non-Detects	77.78%
Mean Detects	26.46	SD Detects	10.62
Median Detects	26	CV Detects	0.401
Skewness Detects	0.125	Kurtosis Detects	-0.228
Mean of Logged Detects	3.192	SD of Logged Detects	0.464

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.925	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.23	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.313	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	11.36	Standard Error of Mean	2.303
SD	11.19	95% KM (BCA) UCL	15.32
95% KM (t) UCL	15.25	95% KM (Percentile Bootstrap) UCL	15.24
95% KM (z) UCL	15.15	95% KM Bootstrap t UCL	15.88
90% KM Chebyshev UCL	18.27	95% KM Chebyshev UCL	21.4
97.5% KM Chebyshev UCL	25.74	99% KM Chebyshev UCL	34.27

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.355	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.718	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.177	**Kolmogrov-Smirnoff GOF**
5% K-S Critical Value	0.295	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	6.131	k star (bias corrected MLE)	3.915
Theta hat (MLE)	4.316	Theta star (bias corrected MLE)	6.759
nu hat (MLE)	98.09	nu star (bias corrected)	62.64
MLE Mean (bias corrected)	26.46	MLE Sd (bias corrected)	13.37

Gamma Kaplan-Meier (KM) Statistics

k hat (KM)	1.03	nu hat (KM)	74.14
Approximate Chi Square Value (74.14, α)	55.31	Adjusted Chi Square Value (74.14, β)	54.57
95% Gamma Approximate KM-UCL (use when n>=50)	15.23	95% Gamma Adjusted KM-UCL (use when n<50)	15.43

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detected data is small such as < 0.1

For such situations, GROS method tends to yield inflated values of UCLs and BTVs

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	8.47
Maximum	41	Median	2.875
SD	11.7	CV	1.382
k hat (MLE)	0.258	k star (bias corrected MLE)	0.255
Theta hat (MLE)	32.83	Theta star (bias corrected MLE)	33.21
nu hat (MLE)	18.58	nu star (bias corrected)	18.36
MLE Mean (bias corrected)	8.47	MLE Sd (bias corrected)	16.77
		Adjusted Level of Significance (β)	0.0428
Approximate Chi Square Value (18.36, α)	9.654	Adjusted Chi Square Value (18.36, β)	9.367
95% Gamma Approximate UCL (use when n>=50)	16.11	95% Gamma Adjusted UCL (use when n<50)	16.61

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.901	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.202	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.313	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	11.26	Mean in Log Scale	2.08
SD in Original Scale	10.11	SD in Log Scale	0.844
95% t UCL (assumes normality of ROS data)	14.11	95% Percentile Bootstrap UCL	14.19
95% BCA Bootstrap UCL	14.72	95% Bootstrap t UCL	14.93
95% H-UCL (Log ROS)	15.69		

UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed

KM Mean (logged)	2.078	95% H-UCL (KM -Log)	14.03
KM SD (logged)	0.76	95% Critical H Value (KM-Log)	2.132
KM Standard Error of Mean (logged)	0.156		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	109.3	Mean in Log Scale	2.56
SD in Original Scale	289.8	SD in Log Scale	2.01
95% t UCL (Assumes normality)	190.9	95% H-Stat UCL	346.3

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	15.25	95% KM (Percentile Bootstrap) UCL	15.24

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Xylenes

General Statistics

Total Number of Observations	36	Number of Distinct Observations	24
Number of Detects	23	Number of Non-Detects	13
Number of Distinct Detects	23	Number of Distinct Non-Detects	1
Minimum Detect	6.8	Minimum Non-Detect	5
Maximum Detect	4600	Maximum Non-Detect	5
Variance Detects	2290628	Percent Non-Detects	36.11%
Mean Detects	1302	SD Detects	1513
Median Detects	530	CV Detects	1.162
Skewness Detects	0.972	Kurtosis Detects	-0.368
Mean of Logged Detects	5.847	SD of Logged Detects	2.109

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.82	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.914	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.217	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.185	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	833.7	Standard Error of Mean	227.9
SD	1337	95% KM (BCA) UCL	1214
95% KM (t) UCL	1219	95% KM (Percentile Bootstrap) UCL	1228
95% KM (z) UCL	1208	95% KM Bootstrap t UCL	1319
90% KM Chebyshev UCL	1517	95% KM Chebyshev UCL	1827
97.5% KM Chebyshev UCL	2257	99% KM Chebyshev UCL	3101

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.679	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.809	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.17	**Kolmogrov-Smirnoff GOF**	
5% K-S Critical Value	0.192	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.482	k star (bias corrected MLE)	0.448
Theta hat (MLE)	2701	Theta star (bias corrected MLE)	2905
nu hat (MLE)	22.18	nu star (bias corrected)	20.62
MLE Mean (bias corrected)	1302	MLE Sd (bias corrected)	1945

Gamma Kaplan-Meier (KM) Statistics

k hat (KM)	0.389	nu hat (KM)	27.99
Approximate Chi Square Value (27.99, α)	16.92	Adjusted Chi Square Value (27.99, β)	16.53
95% Gamma Approximate KM-UCL (use when n>=50)	1379	95% Gamma Adjusted KM-UCL (use when n<50)	1412

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detected data is small such as < 0.1

For such situations, GROS method tends to yield inflated values of UCLs and BTVs

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	831.9
Maximum	4600	Median	40
SD	1357	CV	1.632
k hat (MLE)	0.163	k star (bias corrected MLE)	0.168
Theta hat (MLE)	5097	Theta star (bias corrected MLE)	4948
nu hat (MLE)	11.75	nu star (bias corrected)	12.1
MLE Mean (bias corrected)	831.9	MLE Sd (bias corrected)	2029
		Adjusted Level of Significance (β)	0.0428
Approximate Chi Square Value (12.10, α)	5.296	Adjusted Chi Square Value (12.10, β)	5.092
95% Gamma Approximate UCL (use when n>=50)	1901	95% Gamma Adjusted UCL (use when n<50)	1978

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.903	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.914	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.16	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.185	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	833.6	Mean in Log Scale	4.036
SD in Original Scale	1356	SD in Log Scale	3.085
95% t UCL (assumes normality of ROS data)	1215	95% Percentile Bootstrap UCL	1206
95% BCA Bootstrap UCL	1291	95% Bootstrap t UCL	1305
95% H-UCL (Log ROS)	108141		

UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed

KM Mean (logged)	4.317	95% H-UCL (KM -Log)	18085
KM SD (logged)	2.619	95% Critical H Value (KM-Log)	4.645
KM Standard Error of Mean (logged)	0.446		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	832.8	Mean in Log Scale	4.066
SD in Original Scale	1357	SD in Log Scale	2.926
95% t UCL (Assumes normality)	1215	95% H-Stat UCL	53124

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (BCA) UCL	1214	95% GROS Adjusted Gamma UCL	1978
95% Adjusted Gamma KM-UCL	1412		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ATTACHMENT C

Attachment C-1 DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
71432	8.64E+03	Benzene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
			Totals must add up to value of L_{WT} (cell G28)							
18.6	200	247.5	247.5			A	SCL	SCL		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

Attachment C-1

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
8.95E-02	1.03E-05	5.55E-03	25	7,342	353.24	562.16	1.46E+02	1.79E+03	7.8E-06	3.0E-02

END

Attachment C-1

INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
9.46E+08	47.5	0.238	0.238	0.238	0.259	2.07E-09	0.859	1.78E-09	25.86	0.384	0.051	0.333	4,000

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Capillary zone effective diffusion coefficient, D^{eff}_{cz} (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
2.54E+04	1.80E+06	2.22E-04	200	8,034	4.12E-03	1.72E-01	1.78E-04	5.10E-03	0.00E+00	0.00E+00	4.01E-05	7.31E-05	47.5

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
200	1.49E+06	0.10	1.21E+00	5.10E-03	4.00E+02	3.79E+02	3.32E-05	4.94E+01	7.8E-06	3.0E-02

END

Attachment C-1

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.79E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.6E-04	1.6E+00

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

SCROLL DOWN TO "END"

END

Attachment C-2 DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
100414	6.99E+02	Ethylbenzene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Totals must add up to value of L_{WT} (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
18.6	200	247.5	247.5			A	SCL	SCL		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

Attachment C-2

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
6.85E-02	8.46E-06	7.88E-03	25	8,501	409.34	617.20	4.46E+02	1.69E+02	2.5E-06	1.0E+00

END

Attachment C-2

INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
9.46E+08	47.5	0.238	0.238	0.238	0.259	2.07E-09	0.859	1.78E-09	25.86	0.384	0.051	0.333	4,000

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Capillary zone effective diffusion coefficient, D^{eff}_{cz} (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
2.54E+04	1.80E+06	2.22E-04	200	10,056	5.43E-03	2.27E-01	1.78E-04	3.90E-03	0.00E+00	0.00E+00	2.92E-05	5.32E-05	47.5

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
200	1.59E+05	0.10	1.21E+00	3.90E-03	4.00E+02	2.34E+03	2.98E-05	4.72E+00	2.5E-06	1.0E+00

END

Attachment C-2

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.69E+05	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.8E-06	4.5E-03

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

SCROLL DOWN TO "END"

END

Attachment C-3

DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
79016	1.53E+01	Trichloroethylene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Totals must add up to value of L_{WT} (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
18.6	200	247.5	247.5			A	SCL	SCL		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1

Used to calculate risk-based groundwater concentration.

END

Attachment C-3

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
6.87E-02	1.02E-05	9.85E-03	25	7,505	360.20	544.20	6.07E+01	1.28E+03	4.1E-06	2.0E-03

END

Attachment C-3

INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
9.46E+08	47.5	0.238	0.238	0.238	0.259	2.07E-09	0.859	1.78E-09	25.86	0.384	0.051	0.333	4,000

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Capillary zone effective diffusion coefficient, D^{eff}_{cz} (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
2.54E+04	1.80E+06	2.22E-04	200	8,447	7.20E-03	3.01E-01	1.78E-04	3.91E-03	0.00E+00	0.00E+00	2.86E-05	5.23E-05	47.5

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, exp(Pe^f) (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
200	4.60E+03	0.10	1.21E+00	3.91E-03	4.00E+02	2.29E+03	2.96E-05	1.36E-01	4.1E-06	2.0E-03

END

Attachment C-3

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.28E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.3E-07	6.5E-02

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

SCROLL DOWN TO "END"

END

Attachment C-4 DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
1330207	1.41E+03	Xylenes, total

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Totals must add up to value of L_{WT} (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
18.6	200	247.5	247.5			A	SCL	SCL		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1

Used to calculate risk-based groundwater concentration.

END

Attachment C-4

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
8.47E-02	9.90E-06	5.18E-03	25	8,523	411.30	616.20	3.83E+02	1.06E+02	0.0E+00	1.0E-01

END

Attachment C-4

INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
9.46E+08	47.5	0.238	0.238	0.238	0.259	2.07E-09	0.859	1.78E-09	25.86	0.384	0.051	0.333	4,000

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Capillary zone effective diffusion coefficient, D^{eff}_{cz} (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
2.54E+04	1.80E+06	2.22E-04	200	10,140	3.56E-03	1.49E-01	1.78E-04	4.82E-03	0.00E+00	0.00E+00	3.96E-05	7.23E-05	47.5

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
200	2.10E+05	0.10	1.21E+00	4.82E-03	4.00E+02	5.30E+02	3.31E-05	6.93E+00	NA	1.0E-01

END

Attachment C-4

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.06E+05	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.6E-02

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

SCROLL DOWN TO "END"

END

Attachment C-5

DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES: X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
91203	4.83E+03	Naphthalene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Totals must add up to value of L_{WT} (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
18.6	200	247.5	247.5			A	SCL	SCL		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146	SCL	1.63	0.384	0.146

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1

Used to calculate risk-based groundwater concentration.

END

Attachment C-5

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
6.05E-02	8.38E-06	4.40E-04	25	10,373	490.90	748.40	1.54E+03	3.10E+01	3.4E-05	3.0E-03

END

Attachment C-5

INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
9.46E+08	47.5	0.238	0.238	0.238	0.259	2.07E-09	0.859	1.78E-09	25.86	0.384	0.051	0.333	4,000

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Capillary zone effective diffusion coefficient, D^{eff}_{cz} (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
2.54E+04	1.80E+06	2.22E-04	200	12,818	2.74E-04	1.14E-02	1.78E-04	3.45E-03	0.00E+00	0.00E+00	1.48E-04	2.62E-04	47.5

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
200	5.52E+04	0.10	1.21E+00	3.45E-03	4.00E+02	6.39E+03	4.25E-05	2.34E+00	3.4E-05	3.0E-03

END

Attachment C-5

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	3.10E+04	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.3E-05	7.5E-01

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

SCROLL DOWN TO "END"

END

REGISTERED PROFESSIONAL SUPPORTING DOCUMENTATION

Leslie S. Miller, P.E.
Summary of Hours and Services
Atlanta Gas Light Company – Augusta, GA Former MGP Site
HSI Site No. 10132
Amec Foster Wheeler Project No. 6122-14-0098

Hours for preparation of 1st Semi Annual VRP Status Report and addressing comments from EPD's December 3, 2014 Letter:

106 hours invoiced between August 28, 2014 through May 29, 2015