



## **Plant McIntosh Ash Pond 1**

**Permit No. 051-011D(CCR)  
Effingham County**

# **2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT**



**ATLANTIC COAST  
CONSULTING, INC.**

## PROFESSIONAL CERTIFICATION

This *2022 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Plant McIntosh Ash Pond 1* has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residuals Rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Atlantic Coast Consulting, Inc. (ACC). I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).

### ATLANTIC COAST CONSULTING, INC.



Charles B. Adams, P.G.  
Project Manager  
Date: January 31, 2023



Chad Hall, PhD, P.E.  
Senior Professional Engineer  
Date: January 31, 2023

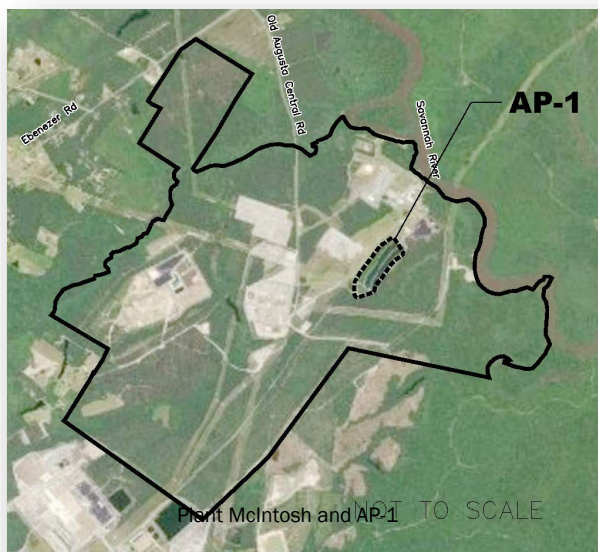
## SUMMARY

This summary of the *2022 Annual Groundwater Monitoring and Corrective Action Report* provides the groundwater monitoring and corrective action program status from January through December 2022 for Georgia Power Company (Georgia Power) Plant McIntosh Ash Pond 1 (the Site or AP-1). This summary was prepared by Atlantic Coast Consulting, Inc. (ACC) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6<sup>1</sup> of the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D).

Plant McIntosh is located at 981 Old Augusta Central Road, approximately 4 miles northeast of the City of Rincon, and 20 miles north of the City of Savannah in Effingham County, Georgia. AP-1 is located on the eastern portion of the Plant McIntosh property. The Site has been closed by removal of CCR material.

Groundwater at the Site is monitored using a comprehensive monitoring system of wells installed to meet federal and state monitoring requirements. Routine sampling and reporting began after background groundwater conditions were established between May 2016 and April 2017. Based on groundwater conditions at the Site, an assessment monitoring program was established on January 15, 2018. An Alternate Source Demonstration (ASD) completed in January 2019 and a November 2019 supplement presented lines of evidence demonstrating that statistically significant levels (SSL) of cobalt and lithium in groundwater were not due to a release from the unit. The ASD and supplemental information were included in the 2018 and 2019 Annual Groundwater Monitoring and Corrective Action Reports, respectively. During this January through December 2022 annual reporting period, the Site remained in assessment monitoring. The Georgia Environmental Protection Division (EPD) approved the CCR permit (051-11D(CCR)) for the Site on February 6, 2020.

On February 22, 2022, Georgia EPD updated the Rules for Solid Waste Management 391-3-4-.10(6) to incorporate updated Federal groundwater protection standards (GWPS) where a Maximum Contaminant Level (MCL) has not been established. These levels were specified for cobalt (0.006 milligrams per Liter - mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L), except when site specific background concentrations of these constituents are higher. Statistical evaluations for the 2022 events were updated to reflect these changes.



Plant McIntosh and Ash Pond 1 (AP-1)

<sup>1</sup> 80 FR 21468, Apr. 17, 2015, as amended at 81 FR 51807, Aug. 5, 2016; 83 FR 36452, July 30, 2018; 85 FR 53561, Aug. 28, 2020

During the reporting period, ACC conducted groundwater sampling events in February and August 2022. Groundwater samples were submitted to Eurofins Environment Testing America (Eurofins) for analysis. Per the CCR Rule, groundwater results for February and August 2022 data were evaluated in accordance with the certified statistical methods. Those evaluations showed statistically significant levels of Appendix III<sup>2</sup> and Appendix IV<sup>3</sup> parameters in wells as summarized in the table below.

Appendix III Parameter	February 2022	August 2022
Boron	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Calcium	MGWC-3	None
Chloride	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Fluoride	MGWC-7	MGWC-7
Sulfate	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
TDS	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Appendix IV Parameter	February 2022	August 2022
Cobalt	MGWC-7, MGWC-8	MGWC-7, MGWC-8
Lithium	MGWC-7	MGWC-7

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from January through December 2022, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to Georgia Power's website and provided to the Georgia EPD semiannually.

<sup>2</sup> Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

<sup>3</sup> Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

## TABLE OF CONTENTS

Section	Page No.
1.0 INTRODUCTION .....	1
1.1 Site Description and Background .....	1
1.2 Regional Geology and Hydrogeologic Setting .....	1
1.3 Groundwater Monitoring System and CCR Unit Description.....	1
2.0 GROUNDWATER MONITORING ACTIVITIES.....	2
2.1 Monitoring Well Installation and Maintenance.....	2
2.2 Assessment Monitoring.....	2
2.3 Additional Groundwater Sampling.....	2
3.0 SAMPLE METHODOLOGY & ANALYSIS.....	3
3.1 Groundwater Flow Direction, Gradient, and Velocity.....	3
3.2 Groundwater Sampling.....	3
3.3 Laboratory Analyses .....	4
3.4 Quality Assurance and Quality Control .....	4
4.0 STATISTICAL ANALYSIS.....	5
4.1 Statistical Analysis Methods .....	5
4.1.1 Appendix III Statistical Methods .....	5
4.1.2 Appendix IV Statistical Methods .....	5
4.2 Statistical Analysis Results .....	6
4.2.1 Semiannual Appendix III Statistical Results.....	6
4.2.2 Semiannual Appendix IV Statistical Results .....	6
5.0 ALTERNATE SOURCE DEMONSTRATION .....	6
6.0 MONITORING PROGRAM STATUS .....	7
7.0 CONCLUSIONS & FUTURE ACTIONS .....	7
8.0 REFERENCES .....	8

## Tables

- Table 1A – Groundwater Monitoring Network Well Construction Details
- Table 1B – Piezometer Construction Details
- Table 2 – Groundwater Sampling Event Summary
- Table 3 – Summary of Groundwater Elevations
- Table 4A – Horizontal Groundwater Flow Velocity Calculations – February 2022
- Table 4B – Horizontal Groundwater Flow Velocity Calculations – August 2022
- Table 5A – Summary of Groundwater Analytical Data – February 2022
- Table 5B – Summary of Groundwater Analytical Data – August 2022
- Table 6 – Statistical Method Summary
- Table 7 – Summary of Background Levels and Groundwater Protection Standards

## Figures

- Figure 1 – Site Location Map
- Figure 2 – CCR Removal Map – August 2022
- Figure 3 – Well Location Map
- Figure 4A – Potentiometric Contour Map – February 2022
- Figure 4B – Potentiometric Contour Map – August 2022

## Appendices

- Appendix A – Laboratory Analytical and Field Sampling Reports
- Appendix B – Statistical Analyses

## 1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management 391-3-4-.10, Atlantic Coast Consulting, Inc. (ACC) has prepared this *2022 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company's (Georgia Power) Plant McIntosh Ash Pond 1 (the Site or AP-1). To specify groundwater monitoring requirements, Georgia EPD Rule 391-3-4-.10(6)(a) incorporates by reference the US EPA CCR Rule 40 CFR § 257 Subpart D. For ease of reference, the US EPA CCR Rules are cited within this report.

A permit application to comply with Georgia EPD Rules was submitted in November 2018 and was approved in February 2020. Monitoring for the CCR Unit is performed in accordance with the permit monitoring requirements [Georgia EPD Permit No. 051-011D(CCR), 40 CFR § 257.90 through 257.91 and § 257.93 through 257.95 of the Federal CCR Rule, and the Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a)].

This report documents activities completed for the groundwater monitoring program from January through December 2022 in accordance with 40 CFR § 257.90(e). This report includes results of the semiannual assessment monitoring events conducted February 2022 and August 2022.

### 1.1 Site Description and Background

Plant McIntosh is located at 981 Old Augusta Central Road, in Effingham County, Georgia, approximately 4 miles northeast of the City of Rincon, and 20 miles north of the City of Savannah. The plant is situated on approximately 2,300 acres (Figure 1, Site Location Map) west of the Savannah River. AP-1 is located on the eastern portion of the plant property.

All CCR material has been removed from Plant McIntosh AP-1. In a letter dated October 5, 2021, Georgia EPD acknowledged that all CCR removal activities had been completed at the Site. The Site has been graded and restored.

### 1.2 Regional Geology and Hydrogeologic Setting

Plant McIntosh is located in the Atlantic Coastal Plain Physiographic Province and situated on sediments that were deposited from the Cretaceous to Pleistocene periods. Regional lithology consists of stratified marine deposits and materials eroded from crystalline rock of the Piedmont Physiographic Province. Boring logs describe soils as interbedded clays, silts, and sands typical of Atlantic Coastal Plain sediments.

Monitoring wells and piezometers are screened in the surficial aquifer between approximately 30 and -20 feet North American Vertical Datum of 1988 (NAVD88). The predominant groundwater flow direction across Plant McIntosh is to the east.

### 1.3 Groundwater Monitoring System and CCR Unit Description

Pursuant to 40 CFR § 257.91, a groundwater monitoring system was installed within the uppermost aquifer at AP-1. The monitoring system is designed to monitor groundwater passing the waste boundary of the CCR Unit within the uppermost aquifer. The CCR Unit includes four cells (Cell A through Cell D). Each of these cells have been closed by removal of CCR. CCR removal

has been certified as complete, and the area has been graded and restored. A figure depicting the cell layout is provided as Figure 2, CCR Removal Map – August 2022. Figure 3, Well Location Map, shows the monitoring well locations. Wells were installed to serve as upgradient and downgradient monitoring points based on groundwater flow direction (Table 1A, Groundwater Monitoring Network Well Construction Details, and Table 1B, Piezometer Construction Details).

## **2.0 GROUNDWATER MONITORING ACTIVITIES**

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed from January through December 2022 and discusses any change in status of the monitoring program. All groundwater sampling was performed in accordance with 40 CFR § 257.93. Samples were collected from each well in the certified monitoring system shown on Figure 3 in February and August 2022.

### **2.1 Monitoring Well Installation and Maintenance**

There were no changes to the groundwater monitoring system during the semiannual reporting period depicted in Figure 3. The network remained the same as in the previous 2021 reporting year. Monitoring well-related activities were limited to the following: visual inspection of well conditions prior to sampling, recording the Site conditions, and performing exterior maintenance necessary for sampling under safe and clean conditions. Well inspection checklists completed during each semiannual sampling event are included in Appendix A, Laboratory Analytical and Field Sampling Reports. Any issues identified in well inspection checklists will be addressed prior to the next monitoring event.

Monitoring wells are inspected semiannually to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In February and August 2022, monitoring wells were inspected, necessary corrective actions were identified and subsequently completed, as documented in Appendix A. Well inspections and corrective actions were performed under the direction of a professional geologist or engineer registered in the State of Georgia.

### **2.2 Assessment Monitoring**

Based on results of the *2017 Annual Groundwater and Corrective Action Monitoring Report*, Georgia Power initiated an assessment monitoring program on January 15, 2018. A notice of assessment monitoring was placed in the operation record on May 15, 2018. Monitoring wells were sampled for Appendix III and Appendix IV parameters in February and August 2022 as the first and second semiannual assessment monitoring events of 2022, respectively. Samples were collected from the monitoring network depicted on Figure 3. A summary of groundwater sampling events completed during the semiannual reporting period is provided in Table 2, Groundwater Sampling Event Summary. Results of sampling activities are presented in Appendix A.

### **2.3 Additional Groundwater Sampling**

Piezometers MGWC-20 and MGWC-23 were sampled February and August 2022 to further characterize groundwater, and data is provided in Appendix A.



### 3.0 SAMPLE METHODOLOGY & ANALYSIS

The following subsections describe the methods used to conduct groundwater monitoring at the Site.

#### 3.1 Groundwater Flow Direction, Gradient, and Velocity

Prior to each sampling event, groundwater levels were measured and recorded to the nearest 0.01 foot within a 24-hour period from the certified well network and piezometers at the Site. Groundwater levels recorded during the monitoring events are summarized in Table 3, Summary of Groundwater Elevations. Groundwater levels and top of casing elevations were used to calculate groundwater elevations and develop the potentiometric surface elevation contour maps provided in Figures 4A and 4B, Potentiometric Contour Map - February 2022 and August 2022, respectively. The general direction of groundwater flow across AP-1 is predominately toward the east. The groundwater flow patterns observed during the 2022 monitoring events are consistent with historical observations.

The horizontal groundwater flow velocity at the Site was calculated using a derivation of Darcy's Law.

Specifically:

Equation

$$v = \frac{K (dh/dl)}{P_e} \quad \text{where:} \quad \begin{array}{l} v = \text{groundwater velocity} \\ K = \text{hydraulic conductivity} \\ dh/dl = \text{hydraulic gradient} \\ P_e = \text{effective porosity} \end{array}$$

Groundwater flow velocities were calculated for the Site based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on the default value for silty sands, US EPA, 1989). Groundwater flow velocities have been calculated and are tabulated on Tables 4A and 4B, Horizontal Groundwater Flow Velocity Calculations - February 2022 and August 2022, respectively. The calculated flow velocity was 0.038 feet per day during the February 2022 event and 0.037 feet per day during the August 2022 event.

This calculated groundwater velocity across the Site is generally consistent with historical calculations and with expected velocities in the Site-specific geology, therefore confirming the groundwater monitoring network is properly located to monitor the uppermost aquifer.

#### 3.2 Groundwater Sampling

Groundwater samples were collected using low-flow sampling procedures in accordance with 40 CFR § 257.93(a). Purging and sampling was performed using either a peristaltic pump or non-dedicated QED bladder pump. In all cases pump intakes were located at the midpoint of the well screen (or as appropriate determined by the water level). All non-disposable equipment was decontaminated before use and between well locations using procedures described in the latest version of the Region 4 US EPA Lab Services and Applied Science Division (LSASD) Operating Procedure for Field Equipment Cleaning and Decontamination as a guide (US EPA, 2020).

An Aqua Troll (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, specific conductance, oxidation-reduction potential [ORP], dissolved oxygen

[DO], and temperature) during well purging prior to sampling. Turbidity was measured using a Hach 2100Q portable turbidity meter. Groundwater samples were collected when the following stabilization criteria were met:

- $\pm 0.1$  standard units for pH
- $\pm 5\%$  for specific conductance
- $\pm 10\%$  or 0.2 milligrams per Liter (mg/L), whichever is greater, for DO where DO > 0.5 mg/L. No criterion applies if DO < 0.5 mg/L
- Turbidity measurements less than 5 nephelometric turbidity units (NTUs)

Once stabilization was achieved, samples were collected directly into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Eurofins Environment Testing America (Eurofins) of Pittsburgh, PA (February 2022), Pittsburgh, PA and Savannah, GA (August 2022) following chain-of-custody protocol. Stabilization logs for each well during each monitoring event are included in Appendix A.

### 3.3 Laboratory Analyses

Groundwater samples were collected during two groundwater monitoring events in the annual monitoring period. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in Appendix A.

Analytical data collected during the monitoring period are summarized in Tables 5A and 5B, Summary of Groundwater Analytical Data – February 2022 and August 2022, respectively.

Laboratory analyses were performed by Eurofins. Eurofins is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for all parameters analyzed for this project. In addition, Eurofins is certified to perform analysis by the State of Georgia. Laboratory reports and chain-of-custody records for the monitoring events are presented in Appendix A.

### 3.4 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples are collected at a rate of at least one field blank and duplicate sample per every 20 assessment samples. A set of QA/QC samples includes equipment blanks, field blanks, and duplicate samples. QA/QC sample data were evaluated during data validation and are included in Appendix A.

Groundwater quality data in this report were validated in accordance with US EPA guidance (US EPA, 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spike/matrix spike duplicate recoveries and relative percent differences (RPDs), post digestion spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. The data are considered usable for meeting project objectives and the results are considered valid. The associated data validation reports are included in Appendix A.

Values followed by a "J" flag on Tables 5A and 5B indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit. The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions.

The initial lab analysis of radium data in MGWC-3 collected in February 2022 was anomalous with historical data, and a reanalysis was performed by the laboratory. After data quality review

of both datasets, the reanalysis data is considered more representative. Based on comparisons with duplicate data, the original data is considered an outlier, and the reanalysis data is used (see laboratory data validation report in Appendix A). The anomalous radium data in MGWC-3 did not recur during the August 2022 event.

## **4.0 STATISTICAL ANALYSIS**

Groundwater monitoring data collected during the February 2022 and August 2022 semiannual assessment monitoring events were statistically analyzed by Groundwater Stats Consulting, LLC pursuant to 40 CFR § 257.95 following the Professional Engineer-certified statistical method. Appendix III detection monitoring parameters were statistically analyzed to determine if constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard (GWPS). Statistical analysis methods and results are provided in Appendix B, Statistical Analyses. The following subsections and Table 6, Statistical Method Summary, provide an overview of the statistical method used to evaluate Appendix III and IV parameters and statistical analyses results.

### **4.1 Statistical Analysis Methods**

The Sanitas groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision-support software package, that incorporates the statistical tests required of Subtitle C and D facilities by US EPA regulations and guidance as recommended in the US EPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance) (US EPA, 2009).

#### **4.1.1 Appendix III Statistical Methods**

Statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits combined with a 1-of-2 verification resample plan for each of the Appendix III parameters. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each parameter. If the most recent sample exceeds its respective background statistical limit, an initial statistically significant increase (SSI) is identified.

In 1-of-2 verification resampling, one independent resample may be collected and evaluated within 90 days to determine whether the initial exceedance is verified. If the resample exceeds the prediction limit, the initial exceedance is verified, and an SSI is identified. When a resample result does not verify the initial result, and does not exceed the prediction limit, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance.

#### **4.1.2 Appendix IV Statistical Methods**

Appendix IV constituents were sampled during the February 2022 and August 2022 semiannual assessment events. To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV parameters in each downgradient well. Those confidence intervals are compared to the GWPS. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its GWPS. If there is an exceedance of the established standard, a statistically significant level (SSL) exceedance is identified.

US EPA revised the Federal CCR Rule on July 30, 2018, updating GWPS for cobalt, lead, lithium, and molybdenum. US EPA's updated GWPS were incorporated into Georgia EPD's CCR Rule 391-3-4-.10(6)(a) on February 22, 2022. The CCR Rule GWPS is as follows:

- (1) The federally established maximum contaminant level (MCL) established under 40 CFR § 141.62 and 141.66.
- (2) Where an MCL has not been established, the levels specified by the CCR Rule:
  - (i). Cobalt 0.006 mg/L;
  - (ii). Lead 0.015 mg/L;
  - (iii). Lithium 0.040 mg/L; and
  - (iv). Molybdenum 0.100 mg/L.
- (3) Background levels for constituents where the background level is higher than the MCL.

On February 22, 2022, Georgia EPD updated to the Rules for Solid Waste Management 391-3-4-.10(6) to incorporate updated Federal GWPS where an MCL has not been established, except when site specific background concentrations of these constituents are higher. Statistical evaluations for the February 2022 and August 2022 events were updated to reflect these changes.

Following the above rule requirements, GWPS have been established for statistical comparison of Appendix IV constituents. Table 7, Summary of Background Levels and Groundwater Protection Standards, summarizes the background limit established for each constituent and the GWPS.

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A substitution of the most recent reporting limit is used for non-detect data. Additional details are presented in the Statistical Analyses provided in Appendix B.

## **4.2 Statistical Analysis Results**

### **4.2.1 Semiannual Appendix III Statistical Results**

Based on review of the Appendix III statistical analysis presented in Appendix B, Appendix III constituents have not returned to background levels. Exceedances were noted and are presented on the prediction limit summary table included in Appendix B. Assessment monitoring should continue pursuant to 40 CFR § 257.95(f).

### **4.2.2 Semiannual Appendix IV Statistical Results**

Based on review of the Appendix IV statistical analyses presented in Appendix B, the following parameters were found to exceed the GWPS during the February and August 2022 sampling events:

- Cobalt: MGWC-7 and MGWC-8
- Lithium: MGWC-7

## **5.0 ALTERNATE SOURCE DEMONSTRATION**

In accordance with 40 CFR § 257.94(e), Georgia Power implemented assessment monitoring in May 2018. SSIs of Appendix III and SSLs of Appendix IV parameters were identified at the Site during the sampling events conducted in February 2022 and August 2022. An Alternate Source

Demonstration (ASD) for cobalt and lithium was included in the *2018 Annual Groundwater Monitoring and Corrective Action Report*, and later supported by the *Supplemental Information for the Ash Pond 1 Alternate Source Demonstration*, dated November 21, 2019. The demonstration showed the source of cobalt and lithium in groundwater is not due to a release from the unit. The Site remains in assessment monitoring due to SSIs for Appendix III parameters.

## 6.0 MONITORING PROGRAM STATUS

In accordance with 40 CFR § 257.94(e), Georgia Power implemented assessment monitoring in May 2018. Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from January through December 2022, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site.

## 7.0 CONCLUSIONS & FUTURE ACTIONS

This *2022 Annual Groundwater Monitoring and Corrective Action Report* for Georgia Power's Plant McIntosh AP-1 was prepared to fulfill the requirements of US EPA's CCR Rule and Georgia EPD Rules for Solid Waste Management Chapter 391-3-4-.10.

Statistical evaluations of the groundwater monitoring data for the Site identified SSIs of Appendix III groundwater monitoring parameters and SSLs of cobalt and lithium. In accordance with 40 CFR § 257.95(g)(3), Georgia Power prepared an ASD for cobalt and lithium in 2018 that concludes the state and federal SSLs for cobalt and lithium are not due to a release from the unit.

Based on the findings presented, AP-1 will remain in assessment monitoring. The next semiannual assessment monitoring event is currently scheduled for February 2023.

## 8.0 REFERENCES

- Georgia Power Company, 2019. *Supplemental Information for the Ash Pond 1 Alternate Source Demonstration*, November 21, 2019.
- GEI Consultants, Inc. 2019. *Alternative Source Demonstration, Plant McIntosh Coal Combustion Residuals, Ash Pond 1*, January 14, 2019.
- Georgia Environmental Protection Division, 1997. *Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia – Circular 14*.
- Groundwater Stats Consulting, 2019. *Plant McIntosh Ash Pond 1 Background Data Screening & Recommended Statistical Methods*. August 2019.
- Groundwater Stats Consulting, 2021. *Plant McIntosh Ash Pond 1 (AP-1) Statistical Analysis – March 2021*. August 2021.
- Sanitas: Groundwater Statistical Software, Sanitas Technologies, Shawnee, KS, 2007.
- Southern Company Services - Earth Science and Environmental Engineering (SCS ES&EE), 2002. Savannah Electric Plant McIntosh Proposed Ash Monofill Site Acceptability Report. July 2002.
- US EPA Waste Management Division Office of Solid Waste, 1989. US EPA 530/SW89-031 Interim Final RCRA Investigation (RFI) Guidance, Volume II or IV.
- US EPA, 2009. *Unified Guidance, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities*. Office of Solid Waste Management Division, US EPA, Washington, D.C.
- US EPA, 2011. *Region IV Data Validation Standard Operating Procedures*. Science and Ecosystem Support Division. Athens, Georgia.
- US EPA, 2017. Groundwater Sampling – Operating Procedure: SESDPROC-3-1-R4, Athens, Georgia, 34 p.
- US EPA, 2020. Field Equipment Cleaning and Decontamination – Operating Procedure: LSASDPROC-205-R4, Athens, Georgia, 16 p.
- US EPA, 2017. *National Functional Guidelines for Inorganic Superfund Methods Data Review*, Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC.

## TABLES

**Table 1A**  
**Groundwater Monitoring Network Well Construction Details**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Well	Installation Date (mm/dd/yyyy)	Northing	Eastings	Top of Casing Elevation (NAVD88)	Bottom Depth (ft BTOC)	Bottom Elevation (NAVD88)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (NAVD88)	Purpose
MGWC-1	11/10/2015	856813.08	964287.47	65.26	56.08	9.18	45.78	19.48	Downgradient Detection
MGWC-2	11/11/2015	856400.69	963958.38	48.54	37.36	11.18	27.06	21.48	Downgradient Detection
MGWC-3	11/11/2015	856033.79	963658.28	52.65	38.74	13.91	28.44	24.21	Downgradient Detection
MGWA-5	11/12/2015	855860.82	962763.17	64.36	63.09	1.27	52.79	11.57	Upgradient Detection
MGWA-6	11/12/2015	856527.73	963130.08	61.08	41.93	19.15	31.63	29.45	Upgradient Detection
MGWA-6A	01/16/2019	856520.82	963113.65	59.76	39.67	20.09	29.40	30.36	Upgradient Detection
MGWC-7	11/13/2015	857417.68	964007.53	54.40	42.29	12.11	31.99	22.41	Downgradient Detection
MGWC-8	11/10/2015	857177.10	964141.67	62.61	52.56	10.05	42.26	20.35	Downgradient Detection
MGWA-10	11/17/2015	855934.25	961406.49	65.07	53.09	11.98	42.79	22.28	Upgradient Detection
MGWA-11	05/27/2016	855985.31	962070.22	64.91	55.81	9.10	45.61	19.30	Upgradient Detection
MGWC-12	05/26/2016	855545.67	963110.24	64.10	52.90	11.20	42.70	21.40	Downgradient Detection

Notes:

1. Northings and Eastings are Georgia State Plane East Zone in feet relative to North American Datum 1983 (NAD83).
2. NAVD88 indicates feet relative to North American Vertical Datum of 1988.
3. ft BTOC indicates feet below top of casing.



**Table 1B  
Piezometer Construction Details  
Plant McIntosh Ash Pond 1  
Effingham County, Georgia**

Well	Installation Date (mm/dd/yyyy)	Northing	Easting	Top of Casing Elevation (NAVD88)	Bottom Depth (ft BTOC)	Bottom Elevation (NAVD88)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (NAVD88)	Purpose
MGWC-4	11/18/2015	855555.05	963139.37	64.33	67.35	-3.02	57.05	7.28	Piezometer
MGWA-9	11/17/2015	857129.70	963164.58	59.29	43.05	16.24	32.75	26.54	Piezometer
PZ-13	06/03/2016	856123.86	964192.52	40.91	26.76	14.15	16.36	24.55	Piezometer
PZ-14	06/04/2016	855727.20	963895.98	47.11	41.50	5.61	31.10	16.01	Piezometer
PZ-15	06/26/2018	856156.03	964192.45	42.37	28.87	13.50	18.57	23.80	Piezometer
PZ-16	06/26/2018	857077.14	964957.28	54.71	42.39	12.32	32.09	22.62	Piezometer
PZ-17	06/27/2018	857655.05	964525.72	57.51	45.12	12.39	34.82	22.69	Piezometer
PZ-18	06/27/2018	857542.34	963505.91	53.48	41.70	11.78	31.40	22.08	Piezometer
MGWC-19	10/04/2018	857406.16	963972.44	53.98	72.70	-18.72	62.40	-8.42	Deep Piezometer
MGWC-20	10/03/2018	857596.86	964281.59	51.56	54.77	-3.21	44.47	7.09	Assessment
MGWC-21	11/28/2018	857159.04	964155.30	62.65	82.68	-20.03	72.38	-9.73	Deep Piezometer
MGWC-22	11/29/2018	856381.60	963948.23	47.53	67.56	-20.03	57.26	-9.73	Deep Piezometer
MGWC-23	11/30/2018	856940.45	964617.96	57.47	42.90	14.57	32.60	24.87	Assessment
MGWA-24	01/17/2019	856600.28	962885.22	60.53	47.00	13.53	35.80	24.73	Piezometer

Notes:

1. Northings and Eastings are Georgia State Plane East Zone in feet relative to North American Datum 1983 (NAD83).
2. NAVD88 elevations are feet relative to North American Vertical Datum of 1988.
3. ft BTOC indicates feet below top of casing.

**Table 2**  
**Groundwater Sampling Event Summary**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Well	Hydraulic Location	Feb. 22-23, 2022	Aug. 2-4, 2022
<b>Purpose of Sampling Event</b>		<b>Semiannual Assessment</b>	<b>Semiannual Assessment</b>
MGWC-1	Downgradient	X	X
MGWC-2	Downgradient	X	X
MGWC-3	Downgradient	X	X
MGWA-5	Upgradient	X	X
MGWA-6	Upgradient	X	X
MGWA-6A	Upgradient	X	X
MGWC-7	Downgradient	X	X
MGWC-8	Downgradient	X	X
MGWA-10	Upgradient	X	X
MGWA-11	Upgradient	X	X
MGWC-12	Downgradient	X	X

Notes:

1. X indicates sample was collected.
2. Semiannual Assessment Event included Appendix III and Appendix IV.

**Table 3**  
**Summary of Groundwater Elevations**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Well ID	Top of Casing Elevation (NAVD88)	Feb. 21, 2022 Groundwater Elevation (NAVD88)	Aug. 1, 2022 Groundwater Elevation (NAVD88)
MGWC-1	65.26	26.02	25.23
MGWC-2	48.54	27.03	26.02
MGWC-3	52.65	32.29	31.25
MGWC-4	64.33	36.51	35.30
MGWA-5	64.36	39.76	38.36
MGWA-6	61.08	37.40	36.25
MGWA-6A	59.76	37.46	36.29
MGWC-7	54.40	30.98	30.23
MGWC-8	62.61	29.12	28.30
MGWA-9	59.29	36.04	35.16
MGWA-10	65.07	46.48	44.84
MGWA-11	64.91	42.62	40.95
MGWC-12	64.10	36.69	35.46
PZ-13	40.91	23.39	22.08
PZ-14	47.11	28.54	27.57
PZ-15	42.37	23.37	22.20
PZ-16	54.71	21.66	21.13
PZ-17	57.51	25.45	24.91
PZ-18	53.48	32.29	31.71
MGWC-19	53.98	29.85	29.21
MGWC-20	51.56	27.78	27.47
MGWC-21	62.65	28.53	27.82
MGWC-22	47.53	28.17	27.18
MGWC-23	57.47	23.32	22.76
MGWA-24	60.53	38.62	37.45

Notes:

1. NAVD88 indicates feet North American Vertical Datum of 1988.

**Table 4A**  
**Horizontal Groundwater Flow Velocity Calculations**  
**February 2022**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Equation

$$v = \frac{K ( dh/dl )}{P_e}$$

where: v = groundwater velocity  
 K = hydraulic conductivity  
 dh/dl = hydraulic gradient  
 P<sub>e</sub> = effective porosity

Values Used in Calculation

Value			Source
K =	3.39E-04	cm/sec	See note 1.
	0.962	ft/day	
dh/dl <sub>1</sub> =	0.0083	ft/ft unitless	Hydraulic gradient from MGWA-10 to PZ-15
dh/dl <sub>2</sub> =	0.0083	ft/ft unitless	MGWA-6 to PZ-16
dh/dl <sub>3</sub> =	0.0073	ft/ft unitless	MGWA-9 to PZ-17
dh/dl <sub>avg</sub> =	0.0079	unitless	Average of dh/dl <sub>1,2,3</sub>
P <sub>e</sub> =	0.20	unitless	See note 2.

Calculated Flow Velocity

$$v = \frac{(0.962)(0.0079)}{0.20}$$

$$v = 0.038 \text{ ft/day, or } 13.9 \text{ ft/year}$$

Notes

- (1) Aquifer tests from Hydrogeologic Assessment Report (Revision 01), Plant McIntosh Ash Pond 1 (AP-1) November 2018, Revised December 2019.
- (2) Default value for silty sands from Interim Final RCRA Investigation (US EPA, 1989)

**Table 4B**  
**HORIZONTAL GROUNDWATER FLOW VELOCITY CALCULATIONS**  
**August 2022**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Equation

$$v = \frac{K ( dh/dl )}{P_e}$$

where: v = groundwater velocity  
K = hydraulic conductivity  
dh/dl = hydraulic gradient  
P<sub>e</sub> = effective porosity

Values Used in Calculation

Value			Source
K =	3.39E-04	cm/sec	See note 1.
	0.962	ft/day	
dh/dl <sub>1</sub> =	0.0081	ft/ft unitless	Hydraulic gradient from MGWA-10 to PZ-15
dh/dl <sub>2</sub> =	0.0080	ft/ft unitless	MGWA-6 to PZ-16
dh/dl <sub>3</sub> =	0.0070	ft/ft unitless	MGWA-9 to PZ-17
dh/dl <sub>avg</sub> =	0.0077	unitless	Average of dh/dl <sub>1,2,3</sub>
P <sub>e</sub> =	0.20	unitless	See note 2.

Calculated Flow Velocity

$$v = \frac{(0.962)(0.0077)}{0.20}$$

$$v = 0.037 \text{ ft/day, or } 13.5 \text{ ft/year}$$

Notes

- (1) Aquifer tests from Hydrogeologic Assessment Report (Revision 01), Plant McIntosh Ash Pond 1 (AP-1) November 2018, Revised December 2019.
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

**Table 5A**  
**Summary of Groundwater Analytical Data**  
**February 2022**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Substance		Well ID							
		MGWA-5	MGWA-6	MGWA-6A	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3
		2/22/2022	2/22/2022	2/22/2022	2/22/2022	2/22/2022	2/22/2022	2/23/2022	2/23/2022
APPENDIX III	<b>Boron</b>	<0.060	<0.060	<0.060	<0.060	<0.060	1.7	2.0	0.83
	<b>Calcium</b>	25	97	90	3.3	36	100	100	120
	<b>Chloride</b>	5.1	4.0	3.3	7.1	3.1	13	13	14
	<b>Fluoride</b>	<0.026	0.034 J	<0.026	<0.026	<0.026	0.047 J	0.075 J	0.086 J
	<b>pH</b>	7.57	7.14	7.20	5.38	7.60	7.32	7.44	6.98
	<b>Sulfate</b>	3.2	5.4	2.1	<0.76	1.1	150	180	150
	<b>TDS</b>	150	300	270	38	210	420	490	450
APPENDIX IV	<b>Antimony</b>	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051
	<b>Arsenic</b>	0.00052 J	0.011	0.013	<0.00028	0.0024	0.0014	<0.00028	0.0016
	<b>Barium</b>	0.038	0.030	0.034	0.022	0.13	0.11	0.046	0.17
	<b>Beryllium</b>	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
	<b>Cadmium</b>	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	0.0039	<0.00022
	<b>Chromium</b>	<0.0015	<0.0015	<0.0015	0.0039	<0.0015	<0.0015	<0.0015	<0.0015
	<b>Cobalt</b>	<0.00026	<0.00026	0.00049 J	<0.00026	<0.00026	<0.00026	0.0016 J	0.0012 J
	<b>Fluoride</b>	<0.026	0.034 J	<0.026	<0.026	<0.026	0.047 J	0.075 J	0.086 J
	<b>Lead</b>	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
	<b>Lithium</b>	0.011	<0.00083	0.0012 J	0.0079	0.027	0.010	0.0066	0.013
	<b>Mercury</b>	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	<b>Molybdenum</b>	0.00091 J	<0.00061	0.00078 J	<0.00061	0.0010 J	0.0014 J	<0.00061	<0.00061
	<b>Radium (226 + 228)</b>	0.511	0.594	0.728	1.06	0.837	1.85	0.598	1.47 <sup>7</sup>
<b>Selenium</b>	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	
<b>Thallium</b>	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
7. Radium analytical data for MGWC-3 was reanalyzed by the laboratory and the value shown is the reanalysis result.

**Table 5A**  
**Summary of Groundwater Analytical Data**  
**February 2022**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Substance		Well ID		
		MGWC-7	MGWC-8	MGWC-12
		2/23/2022	2/23/2022	2/22/2022
APPENDIX III	<b>Boron</b>	2.1	4.1	<0.060
	<b>Calcium</b>	61	97	35
	<b>Chloride</b>	9.8	11	4.0
	<b>Fluoride</b>	0.22	0.050 J	0.093 J
	<b>pH</b>	6.91	6.22	7.41
	<b>Sulfate</b>	260	390	4.8
	<b>TDS</b>	390	630	190
APPENDIX IV	<b>Antimony</b>	<0.00051	<0.00051	<0.00051
	<b>Arsenic</b>	0.00040 J	0.00044 J	0.00089 J
	<b>Barium</b>	0.014	0.036	0.067
	<b>Beryllium</b>	<0.00027	0.0014 J	<0.00027
	<b>Cadmium</b>	<0.00022	0.0014 J	<0.00022
	<b>Chromium</b>	<0.0015	<0.0015	<0.0015
	<b>Cobalt</b>	0.007	0.015	<0.00026
	<b>Fluoride</b>	0.22	0.050 J	0.093 J
	<b>Lead</b>	<0.00017	<0.00017	<0.00017
	<b>Lithium</b>	0.13	0.028	0.022
	<b>Mercury</b>	<0.00013	0.00028	<0.00013
	<b>Molybdenum</b>	<0.00061	<0.00061	0.00064 J
	<b>Radium (226 + 228)</b>	1.42	2.62	0.888
	<b>Selenium</b>	<0.00074	<0.00074	<0.00074
<b>Thallium</b>	<0.00047	<0.00047	<0.00047	

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.  
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
7. Radium analytical data for MGWC-3 was reanalyzed by the laboratory and the value shown is the reanalysis result.

**Table 5B**  
**Summary of Groundwater Analytical Data**  
**August 2022**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Substance		Well ID							
		MGWA-5	MGWA-6	MGWA-6A	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3
		8/2/2022	8/2/2022	8/2/2022	8/2/2022	8/2/2022	8/3/2022	8/4/2022	8/3/2022
APPENDIX III	<b>Boron</b>	<0.060	<0.060	<0.060	<0.060	<0.060	1.7	1.9	0.76
	<b>Calcium</b>	26	110	94	3.1	36	110	98	110
	<b>Chloride</b>	3.5	2.6	2.8	7.4	3.4	13	12	13
	<b>Fluoride</b>	0.066 J	0.055 J	0.052 J	<0.040	0.065 J	0.12	0.072 J	0.079 J
	<b>pH</b>	7.45	7.10	7.27	5.41	7.57	7.23	7.37	6.91
	<b>Sulfate</b>	2.7	2.3	2.1	<0.40	0.80 J	140	150	130
	<b>TDS</b>	270	200	190	65	210	440	480	430
APPENDIX IV	<b>Antimony</b>	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051
	<b>Arsenic</b>	<0.00028	0.0093	0.0020	<0.00028	0.0022	0.0015	<0.00028	0.0016
	<b>Barium</b>	0.031	0.034	0.023	0.018	0.12	0.11	0.042	0.15
	<b>Beryllium</b>	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
	<b>Cadmium</b>	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	0.000085 J	0.00020 J	<0.000078
	<b>Chromium</b>	<0.0015	<0.0015	<0.0015	0.0030	<0.0015	<0.0015	<0.0015	<0.0015
	<b>Cobalt</b>	0.012	0.00030 J	0.00034 J	<0.00022	<0.00022	<0.00022	0.0013 J	0.00051 J
	<b>Fluoride</b>	0.066 J	0.055 J	0.052 J	<0.040	0.065 J	0.12	0.072 J	0.079 J
	<b>Lead</b>	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
	<b>Lithium</b>	0.0097	<0.00083	<0.00083	0.0071	0.025	0.010	0.0063	0.013
	<b>Mercury</b>	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080
	<b>Molybdenum</b>	<0.00086	<0.00086	0.0015 J	<0.00086	<0.00086	0.0011 J	<0.00086	<0.00086
	<b>Radium (226 + 228)</b>	0.350 U	0.683	0.420 U	0.239 U	0.967	2.20	0.632	2.56
	<b>Selenium</b>	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
<b>Thallium</b>	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the substance was detected below the Minimum Detectable Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.



**Table 5B**  
**Summary of Groundwater Analytical Data**  
**August 2022**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Substance		Well ID		
		MGWC-7	MGWC-8	MGWC-12
		8/3/2022	8/4/2022	8/2/2022
APPENDIX III	Boron	2.3	4.3	0.071 J
	Calcium	66	100	34
	Chloride	11	13	4.9
	Fluoride	0.20	0.087 J	0.074 J
	pH	6.86	6.50	7.06
	Sulfate	220	350	3.1
	TDS	400	620	150
APPENDIX IV	Antimony	<0.00051	<0.00051	0.0015 J
	Arsenic	0.00052 J	0.00075 J	0.0015
	Barium	0.018	0.043	0.057
	Beryllium	<0.00020	0.00064 J	<0.00020
	Cadmium	0.00041 J	0.0037	<0.000078
	Chromium	<0.0015	<0.0015	<0.0015
	Cobalt	0.0044	0.0092	<0.00022
	Fluoride	0.20	0.087 J	0.074 J
	Lead	0.00021 J	<0.00017	<0.00017
	Lithium	0.13	0.021	0.026
	Mercury	<0.000080	0.00068	<0.000080
	Molybdenum	<0.00086	<0.00086	0.00093 J
	Radium (226 + 228)	1.11	1.24	1.08
	Selenium	<0.0012	<0.0012	<0.0012
Thallium	<0.00026	<0.00026	<0.00026	

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Results for pH are reported in standard units (S.U.). Radium results are reported in picocuries per liter (pCi/L).
2. Radium data are for Radium 226 & Radium 228 (combined).
3. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.  
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the substance was detected below the Minimum Detectable Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Table 6  
Statistical Method Summary  
Plant McIntosh Ash Pond 1  
Effingham County, Georgia**

<b>Plant McIntosh AP-1 Statistical Method Summary</b>		
Monitoring Well Network	Upgradient Wells	MGWA-5, MGWA-6, MGWA-6A, MGWA-10, and MGWA-11
	Downgradient Wells	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8, and MGWC-12
CCR Monitoring Parameters	Appendix III (Detection Monitoring)	Boron, Calcium, Chloride, Fluoride, pH, Sulfate, and Total Dissolved Solids (TDS)
	Appendix IV (Assessment Monitoring)	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, combined Radium 226 + 228, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, and Thallium
Statistical Methodology	Data Screening Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available
	Statistical Limits	Interwell statistical limits

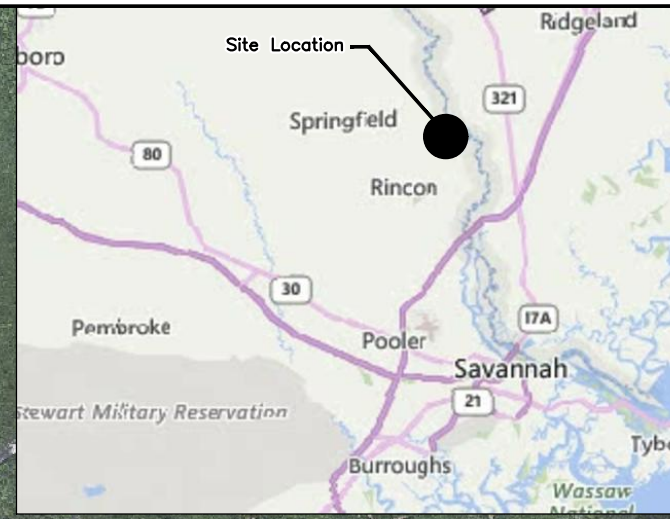
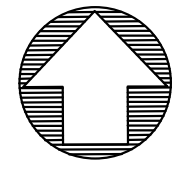

**Table 7**  
**Summary of Background Levels and Groundwater Protection Standards**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Constituent	Site Background	CCR-Rule Specified GWPS	MCL	GWPS
Antimony	0.002	n/a	0.006	0.006
Arsenic	0.014	n/a	0.01	0.014
Barium	0.13	n/a	2	2
Beryllium	0.0025	n/a	0.004	0.004
Cadmium	0.0025	n/a	0.005	0.005
Chromium	0.0063	n/a	0.1	0.1
Cobalt	0.0025	0.006	n/a	0.006
Fluoride	0.19	n/a	4	4
Lead	0.001	0.015	n/a	0.015
Lithium	0.03	0.04	n/a	0.04
Mercury	0.0002	n/a	0.002	0.002
Molybdenum	0.015	0.1	n/a	0.1
Radium (226+228)	1.14	n/a	5	5
Selenium	0.005	n/a	0.05	0.05
Thallium	0.001	n/a	0.002	0.002

Notes:


1. Site Background = Tolerance limits calculated from pooled upgradient well data.
2. MCL = Maximum Contaminant Level, per Georgia EPD Rule 391-3-5-.18(1)(a).
3. GWPS = Groundwater protection standard, per Georgia EPD Rule 391-3-4-.10(6)(a).
4. CCR-Rule specified GWPS as stipulated in 40 CFR 257.95(h)(1-3) and incorporated into Georgia EPD's CCR Rule 391-3-4-.10(6)(a) on February 22, 2022.
5. Units are milligrams per liter (mg/L), except for radium, which are picocuries per liter.
6. n/a = not applicable. There is no established MCL, per Georgia EPD Rule 391-3-5-.18(1)(a).

## FIGURES



ATLANTIC COAST  
CONSULTING, INC.

2,500 0 1,250 2,500




SCALE (IN FEET)

**LEGEND:**

EXISTING	DESCRIPTION
	APPROXIMATE PROPERTY BOUNDARY
	APPROXIMATE AP-1 BOUNDARY

NOTES:  
 1. AERIAL DATED 8/25/2022 FROM SAM, LLC.  
 ADDITIONAL PHOTOGRAPHY DATED 2022 FROM  
 MICROSOFT CORPORATION, MAXAR, CNES,  
 DISTRIBUTION AIRBUS DS.

PROJECT

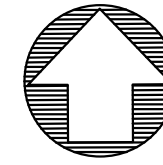
 Georgia Power

GEORGIA POWER COMPANY  
 PLANT McINTOSH ASH POND 1

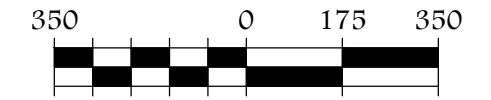
2022 ANNUAL GROUNDWATER MONITORING AND  
 CORRECTIVE ACTION REPORT

**SITE LOCATION MAP**

PROJECT NO. I054-117		October 2022
<u>DRAWN BY:</u>	MM	<u>FIGURE:</u>
<u>CHECKED BY:</u>	CA	



*Acc*



SCALE (IN FEET)

**LEGEND:**

EXISTING	DESCRIPTION
	APPROXIMATE AP-1 BOUNDARY
	AREA WHERE ASH REMOVAL WAS COMPLETED IN OCTOBER 2021
	MGWC-1 DETECTION WELL
	MGWC-23 ASSESSMENT WELL
	PZ-17 PIEZOMETER

- NOTES:
1. CELL BOUNDARY LAYERS PROVIDED BY GEI CONSULTANTS.
  2. AERIAL DATED 8/25/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT



GEORGIA POWER COMPANY  
PLANT McINTOSH ASH POND 1

2022 ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT

**CCR REMOVAL MAP  
AUGUST 2022**

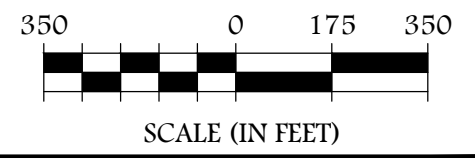
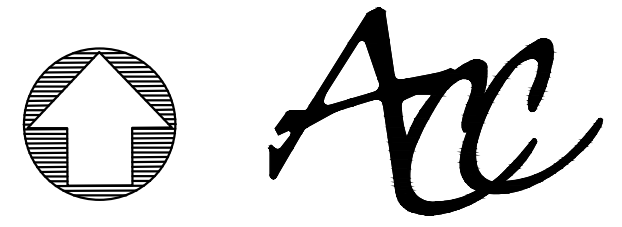
PROJECT NO. I054-117

November 2022

DRAWN BY: MM

FIGURE:

CHECKED BY: CA



**LEGEND:**

EXISTING	DESCRIPTION
	APPROXIMATE AP-1 BOUNDARY
	MGWC-1 DETECTION WELL
	MGWC-23 ASSESSMENT WELL
	PZ-17 PIEZOMETER

NOTES:  
 1. AERIAL DATED 8/25/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT

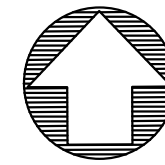
GEORGIA POWER COMPANY  
 PLANT McINTOSH ASH POND 1  
 2022 ANNUAL GROUNDWATER MONITORING AND  
 CORRECTIVE ACTION REPORT  
**WELL LOCATION MAP**

PROJECT NO. I054-117		October 2022
<u>DRAWN BY:</u>	MM	<u>FIGURE:</u>  3
<u>CHECKED BY:</u>	CA	

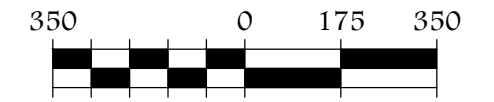
Summary of Groundwater Elevations  
Plant McIntosh  
Ash Pond 1  
February 2022 Sampling Event

Monitoring Well ID	Total Depth (ft BTOC)	Top of Casing (ft NAVD)	Depth to Water (ft BTOC)	Groundwater Elevation (ft NAVD)
MGWC-1	56.08	65.26	39.24	26.02
MGWC-2	37.36	48.54	21.51	27.03
MGWC-3	38.74	52.65	20.36	32.29
MGWC-4	67.35	64.33	27.82	36.51
MGWA-5	63.09	64.36	24.60	39.76
MGWA-6	41.93	61.08	23.68	37.40
MGWA-6A	39.67	59.76	22.30	37.46
MGWC-7	42.29	54.40	23.42	30.98
MGWC-8	52.56	62.61	33.49	29.12
MGWA-9	43.05	59.29	23.25	36.04
MGWA-10	53.09	65.07	18.59	46.48
MGWA-11	55.81	64.91	22.29	42.62
MGWC-12	52.90	64.10	27.41	36.69
PZ-13	26.76	40.91	17.52	23.39
PZ-14	41.50	47.11	18.57	28.54
PZ-15	28.87	42.37	19.00	23.37
PZ-16	42.39	54.71	33.05	21.66
PZ-17	45.12	57.51	32.06	25.45
PZ-18	41.70	53.48	21.19	32.29
MGWC-19	72.70	53.98	24.13	29.85
MGWC-20	54.77	51.56	23.78	27.78
MGWC-21	82.68	62.65	34.12	28.53
MGWC-22	67.56	47.53	19.36	28.17
MGWC-23	42.90	57.47	34.15	23.32
MGWA-24	47.00	60.53	21.91	38.62

Notes: Depths to water measured within a 24-hour period on February 21, 2022.  
ft NAVD = feet North American Vertical Datum of 1988  
ft BTOC = feet below top of casing  
\* MGWC-4, MGWC-19, MGWC-21, and MGWC-22 not used to calculate contours.



ATLANTIC COAST  
CONSULTING, INC.



SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
	APPROXIMATE AP-1 BOUNDARY
	MGWC-1 27.18 DETECTION WELL GROUNDWATER ELEVATION
	MGWC-23 22.76 ASSESSMENT WELL GROUNDWATER ELEVATION
	PZ-17 27.10 PIEZOMETER GROUNDWATER ELEVATION
	24 GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION

NOTES:  
1. AERIAL DATED 2/15/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2021 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT



GEORGIA POWER COMPANY  
PLANT McINTOSH ASH POND 1

2022 ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT

POTENTIOMETRIC CONTOUR MAP  
FEBRUARY 2022

PROJECT NO. I054-117

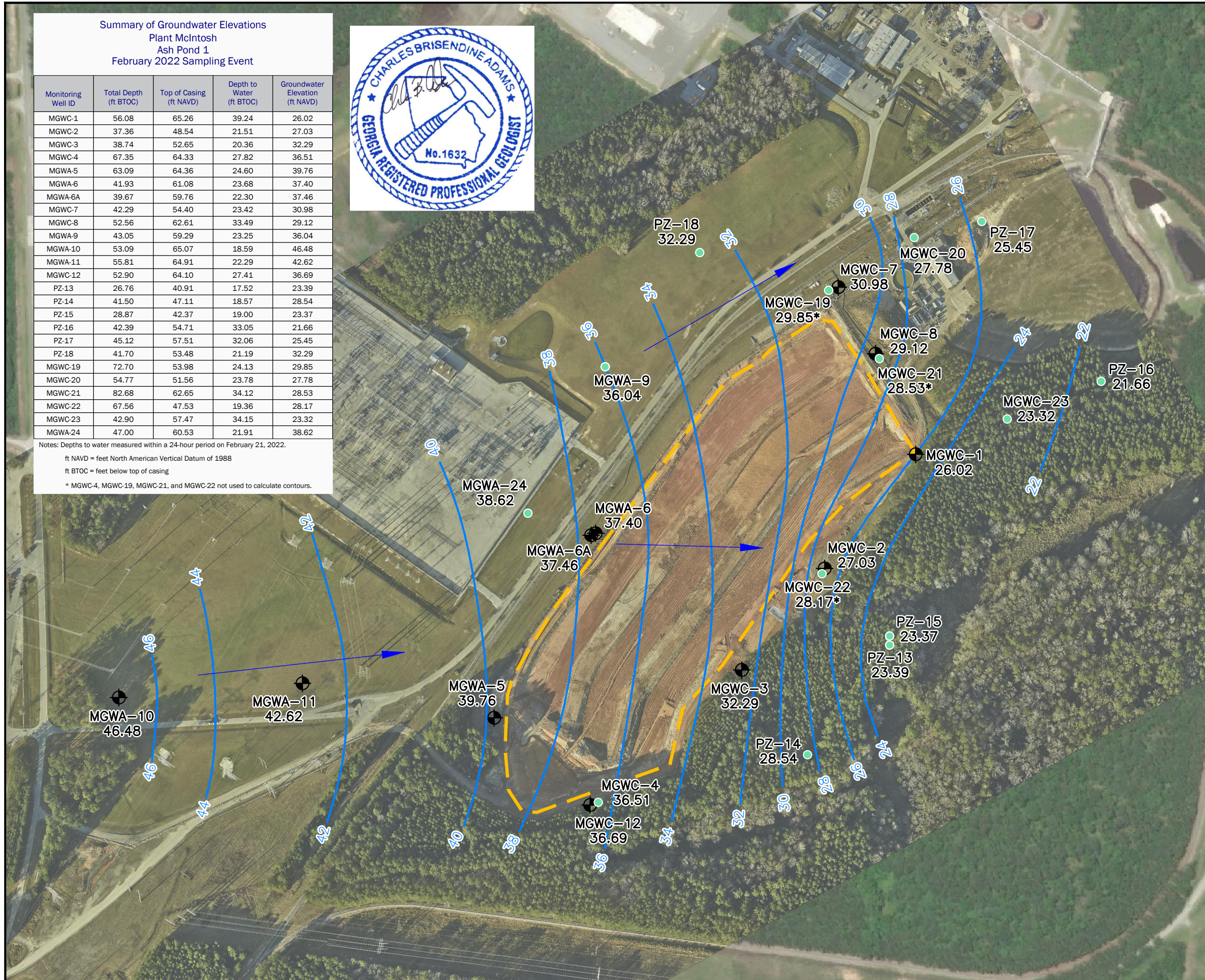
June 2022

DRAWN BY: RW

FIGURE:

CHECKED BY: MM

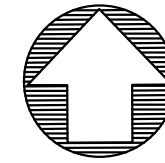
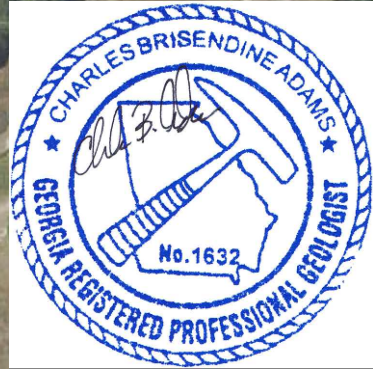
4A





Summary of Groundwater Elevations  
Plant McIntosh  
Ash Pond 1  
August 2022 Sampling Event

Monitoring Well ID	Total Depth (ft BTOC)	Top of Casing (ft NAVD)	Depth to Water (ft BTOC)	Groundwater Elevation (ft NAVD)
MGWC-1	56.08	65.26	40.03	25.23
MGWC-2	37.36	48.54	22.52	26.02
MGWC-3	38.74	52.65	21.40	31.25
MGWC-4	67.35	64.33	29.03	35.30
MGWA-5	63.09	64.36	26.00	38.36
MGWA-6	41.93	61.08	24.83	36.25
MGWA-6A	39.67	59.76	23.47	36.29
MGWC-7	42.29	54.40	24.17	30.23
MGWC-8	52.56	62.61	34.31	28.30
MGWA-9	43.05	59.29	24.13	35.16
MGWA-10	53.09	65.07	20.23	44.84
MGWA-11	55.81	64.91	23.96	40.95
MGWC-12	52.90	64.10	28.64	35.46
PZ-13	26.76	40.91	18.83	22.08
PZ-14	41.50	47.11	19.54	27.57
PZ-15	28.87	42.37	20.17	22.20
PZ-16	42.39	54.71	33.58	21.13
PZ-17	45.12	57.51	32.60	24.91
PZ-18	41.70	53.48	21.77	31.71
MGWC-19	72.70	53.98	24.77	29.21*
MGWC-20	54.77	51.56	24.09	27.47
MGWC-21	82.68	62.65	34.83	27.82*
MGWC-22	67.56	47.53	20.35	27.18*
MGWC-23	42.90	57.47	34.71	22.76
MGWA-24	47.00	60.53	23.08	37.45



ATLANTIC COAST  
CONSULTING, INC.

350 0 175 350



SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
	APPROXIMATE AP-1 BOUNDARY
	MGWC-1 27.18 DETECTION WELL GROUNDWATER ELEVATION
	MGWC-23 22.76 ASSESSMENT WELL GROUNDWATER ELEVATION
	PZ-17 27.10 PIEZOMETER GROUNDWATER ELEVATION
	24 GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION

NOTES:

- AERIAL DATED 8/25/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT



GEORGIA POWER COMPANY  
PLANT McINTOSH ASH POND 1

2022 ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT

POTENTIOMETRIC CONTOUR MAP  
AUGUST 2022

PROJECT NO. I054-117

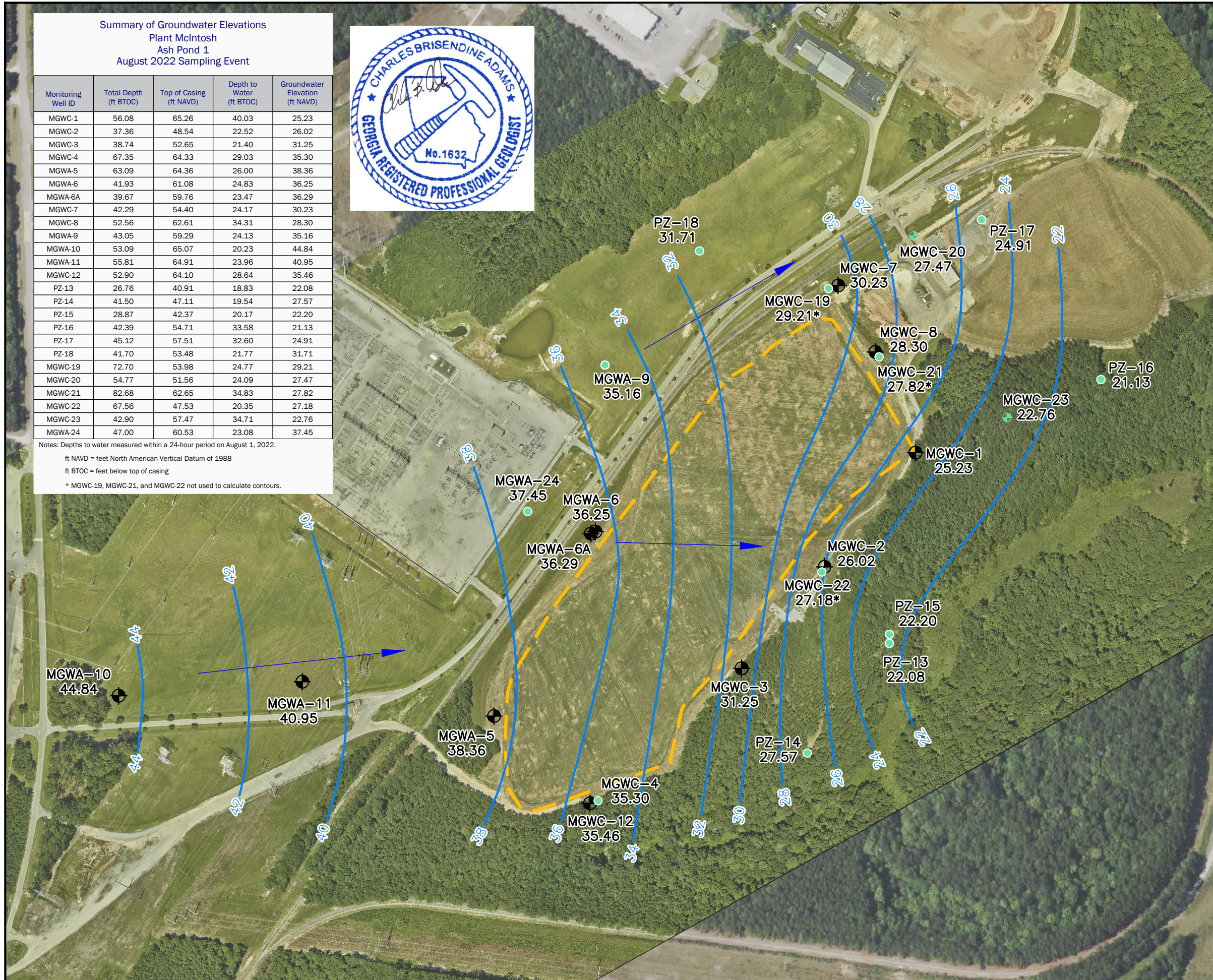
September 2022

DRAWN BY: RW

FIGURE:

CHECKED BY: MM

4B



## APPENDICES

## APPENDIX A

### Laboratory Analytical and Field Sampling Reports

## APPENDIX A

---

*Laboratory Analytical and Field Sampling Reports  
February 2022 Monitoring Event*

## ANALYTICAL REPORT

Eurofins Pittsburgh  
301 Alpha Drive  
RIDC Park  
Pittsburgh, PA 15238  
Tel: (412)963-7058

Laboratory Job ID: 180-134223-1

Client Project/Site: Plant McIntosh Ash Pond 1  
Revision: 1

**For:**

Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Attn: Kristen N Jurinko



*Authorized for release by:  
4/4/2022 10:19:04 AM*

Shali Brown, Project Manager II  
(615)301-5031  
[Shali.Brown@Eurofinset.com](mailto:Shali.Brown@Eurofinset.com)

### LINKS

Review your project  
results through  
**Total Access**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

PA Lab ID: 02-00416



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions/Glossary . . . . .	4
Certification Summary . . . . .	5
Sample Summary . . . . .	6
Method Summary . . . . .	7
Lab Chronicle . . . . .	8
Client Sample Results . . . . .	16
QC Sample Results . . . . .	33
QC Association Summary . . . . .	42
Chain of Custody . . . . .	48
Receipt Checklists . . . . .	56

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Job ID: 180-134223-1**

**Laboratory: Eurofins Pittsburgh**

## Narrative

### Job Narrative 180-134223-1

#### Comments

040422 Revised report at client request to correct result for Boron on the following sample after re-analysis: FB-2 (180-134315-3). Client also requested sample collection date change on the following sample to 022322: EB-2 (180-134317-3) A revised chain of custody is included. This report replaces the report previously issued on 032422.

#### Receipt

The samples were received on 2/24/2022 12:30 PM and 2/26/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.6° C, 2.6° C, 3.4° C, 3.4° C, 3.6° C and 4.0° C.

#### GC Semi VOA

Methods 300.0, 9056A: An incorrect volume of spiking solution was inadvertently added to the laboratory control sample (LCS), associated with analytical batch 180-389894. LCS was double spiked with reagent. Percent recoveries are based on the amount spiked.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Methods 200.8, 6020B: The continuing calibration verification (CCV) associated with batch 180-390021 recovered above the upper control limit for boron. The samples associated with this CCV were non-detects/batch QC for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 180-390021/135).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Definitions/Glossary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Qualifiers

### HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Accreditation/Certification Summary

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-02-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22 *
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-23
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



# Sample Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-134223-1	DUP-1	Water	02/22/22 00:01	02/24/22 12:30
180-134223-2	MGWA-10	Water	02/22/22 10:31	02/24/22 12:30
180-134223-3	MGWA-11	Water	02/22/22 13:45	02/24/22 12:30
180-134223-4	MGWC-1	Water	02/22/22 16:05	02/24/22 12:30
180-134223-5	FB-1	Water	02/22/22 15:30	02/24/22 12:30
180-134223-6	MGWA-6A	Water	02/22/22 11:05	02/24/22 12:30
180-134223-7	MGWA-6	Water	02/22/22 12:15	02/24/22 12:30
180-134223-8	MGWA-5	Water	02/22/22 13:32	02/24/22 12:30
180-134223-9	EB-1	Water	02/22/22 13:40	02/24/22 12:30
180-134223-10	MGWC-12	Water	02/22/22 15:00	02/24/22 12:30
180-134315-1	MGWC-2	Water	02/23/22 09:50	02/26/22 10:00
180-134315-2	MGWC-7	Water	02/23/22 11:25	02/26/22 10:00
180-134315-3	FB-2	Water	02/23/22 14:55	02/26/22 10:00
180-134315-4	MGWC-8	Water	02/23/22 15:50	02/26/22 10:00
180-134317-1	DUP-2	Water	02/23/22 00:01	02/26/22 10:00
180-134317-2	MGWC-3	Water	02/23/22 12:40	02/26/22 10:00
180-134317-3	EB-2	Water	02/23/22 14:40	02/26/22 10:00



# Method Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

#### Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: DUP-1**  
**Date Collected: 02/22/22 00:01**  
**Date Received: 02/24/22 12:30**

**Lab Sample ID: 180-134223-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 16:49	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/01/22 23:30	RSK	TAL PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 09:57	RSK	TAL PIT
Instrument ID: NEMO										
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 14:55	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										

**Client Sample ID: MGWA-10**  
**Date Collected: 02/22/22 10:31**  
**Date Received: 02/24/22 12:30**

**Lab Sample ID: 180-134223-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 18:04	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/01/22 23:34	RSK	TAL PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 10:00	RSK	TAL PIT
Instrument ID: NEMO										
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 14:56	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390455	02/22/22 10:31	FDS	TAL PIT
Instrument ID: NOEQUIP										

**Client Sample ID: MGWA-11**  
**Date Collected: 02/22/22 13:45**  
**Date Received: 02/24/22 12:30**

**Lab Sample ID: 180-134223-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 18:29	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/01/22 23:52	RSK	TAL PIT
Instrument ID: A										

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWA-11**  
**Date Collected: 02/22/22 13:45**  
**Date Received: 02/24/22 12:30**

**Lab Sample ID: 180-134223-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 10:12	RSK	TAL PIT
Instrument ID: NEMO										
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 14:57	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390455	02/22/22 13:45	FDS	TAL PIT
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-1**  
**Date Collected: 02/22/22 16:05**  
**Date Received: 02/24/22 12:30**

**Lab Sample ID: 180-134223-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 18:54	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/01/22 23:55	RSK	TAL PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 10:22	RSK	TAL PIT
Instrument ID: NEMO										
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 14:58	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390455	02/22/22 16:05	FDS	TAL PIT
Instrument ID: NOEQUIP										

**Client Sample ID: FB-1**  
**Date Collected: 02/22/22 15:30**  
**Date Received: 02/24/22 12:30**

**Lab Sample ID: 180-134223-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 19:44	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/02/22 00:06	RSK	TAL PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 10:25	RSK	TAL PIT
Instrument ID: NEMO										

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Client Sample ID: FB-1

Lab Sample ID: 180-134223-5

Date Collected: 02/22/22 15:30

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 14:59	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-6A

Lab Sample ID: 180-134223-6

Date Collected: 02/22/22 11:05

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 20:59	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/02/22 00:10	RSK	TAL PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 10:27	RSK	TAL PIT
Instrument ID: NEMO										
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 15:00	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390455	02/22/22 11:05	FDS	TAL PIT
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-6

Lab Sample ID: 180-134223-7

Date Collected: 02/22/22 12:15

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 21:23	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/02/22 00:13	RSK	TAL PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 10:30	RSK	TAL PIT
Instrument ID: NEMO										
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 15:04	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Client Sample ID: MGWA-6

## Lab Sample ID: 180-134223-7

Date Collected: 02/22/22 12:15

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			390455	02/22/22 12:15	FDS	TAL PIT

## Client Sample ID: MGWA-5

## Lab Sample ID: 180-134223-8

Date Collected: 02/22/22 13:32

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1			389675	02/26/22 23:28	JRB	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			390021	03/02/22 00:17	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			390093	03/02/22 10:33	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGY		1			390482	03/04/22 15:05	RJR	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			390455	02/22/22 13:32	FDS	TAL PIT

## Client Sample ID: EB-1

## Lab Sample ID: 180-134223-9

Date Collected: 02/22/22 13:40

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1			389675	02/26/22 21:48	JRB	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			390021	03/02/22 00:21	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			390093	03/02/22 10:35	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGY		1			390482	03/04/22 15:06	RJR	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Client Sample ID: MGWC-12

## Lab Sample ID: 180-134223-10

Date Collected: 02/22/22 15:00

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389675	02/26/22 22:13	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390021	03/02/22 00:24	RSK	TAL PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			50 mL	50 mL	389786	02/28/22 11:38	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390093	03/02/22 10:38	RSK	TAL PIT
Instrument ID: NEMO										
Total/NA	Prep	7470A			25 mL	25 mL	390261	03/03/22 11:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390482	03/04/22 15:08	RJR	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389840	02/28/22 17:18	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390455	02/22/22 15:00	FDS	TAL PIT
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-2

## Lab Sample ID: 180-134315-1

Date Collected: 02/23/22 09:50

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			390373	03/05/22 04:39	JRB	TAL PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			50 mL	50 mL	389898	03/01/22 09:50	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390197	03/02/22 14:09	RSK	TAL PIT
Instrument ID: A										
Total/NA	Prep	7470A			25 mL	25 mL	390578	03/06/22 10:43	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390860	03/08/22 14:19	KFS	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389843	02/28/22 17:34	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390665	02/23/22 09:50	FDS	TAL PIT
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-7

## Lab Sample ID: 180-134315-2

Date Collected: 02/23/22 11:25

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389764	02/28/22 17:28	JRB	TAL PIT
Instrument ID: CHICS2100B										
Total/NA	Analysis	EPA 300.0 R2.1		5			389894	03/01/22 21:23	JRB	TAL PIT
Instrument ID: CHICS2100B										

Eurofins Pittsburgh



# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-7**

**Lab Sample ID: 180-134315-2**

**Date Collected: 02/23/22 11:25**

**Matrix: Water**

**Date Received: 02/26/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	389898	03/01/22 09:50	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390197	03/02/22 14:13	RSK	TAL PIT
		Instrument ID: A								
Total/NA	Prep	7470A			25 mL	25 mL	390578	03/06/22 10:43	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390860	03/08/22 14:20	KFS	TAL PIT
		Instrument ID: HGY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389966	03/01/22 16:09	JCR	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			390665	02/23/22 11:25	FDS	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: FB-2**

**Lab Sample ID: 180-134315-3**

**Date Collected: 02/23/22 14:55**

**Matrix: Water**

**Date Received: 02/26/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389764	02/28/22 17:42	JRB	TAL PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	389898	03/01/22 09:50	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390197	03/02/22 14:17	RSK	TAL PIT
		Instrument ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	389898	03/01/22 09:50	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			393913	04/01/22 08:40	RSK	TAL PIT
		Instrument ID: NEMO								
Total/NA	Prep	7470A			25 mL	25 mL	390578	03/06/22 10:43	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390860	03/08/22 14:21	KFS	TAL PIT
		Instrument ID: HGY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389966	03/01/22 16:09	JCR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: MGWC-8**

**Lab Sample ID: 180-134315-4**

**Date Collected: 02/23/22 15:50**

**Matrix: Water**

**Date Received: 02/26/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389764	02/28/22 18:36	JRB	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Analysis	EPA 300.0 R2.1		5			389764	02/28/22 18:50	JRB	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Analysis	EPA 300.0 R2.1		1			392317	03/20/22 02:40	JRB	TAL PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	389898	03/01/22 09:50	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390197	03/02/22 14:27	RSK	TAL PIT
		Instrument ID: A								

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-8**

**Lab Sample ID: 180-134315-4**

Date Collected: 02/23/22 15:50

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	390578	03/06/22 10:43	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390860	03/08/22 14:22	KFS	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389966	03/01/22 16:09	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390665	02/23/22 15:50	FDS	TAL PIT
Instrument ID: NOEQUIP										

**Client Sample ID: DUP-2**

**Lab Sample ID: 180-134317-1**

Date Collected: 02/23/22 00:01

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389764	02/28/22 19:17	JRB	TAL PIT
Instrument ID: CHICS2100B										
Total/NA	Analysis	EPA 300.0 R2.1		1			389894	03/01/22 21:36	JRB	TAL PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			50 mL	50 mL	389899	03/01/22 09:53	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390199	03/02/22 12:02	RSK	TAL PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	390578	03/06/22 10:43	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390860	03/08/22 14:23	KFS	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389966	03/01/22 16:09	JCR	TAL PIT
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-3**

**Lab Sample ID: 180-134317-2**

Date Collected: 02/23/22 12:40

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			389764	02/28/22 19:45	JRB	TAL PIT
Instrument ID: CHICS2100B										
Total/NA	Analysis	EPA 300.0 R2.1		1			389894	03/01/22 21:50	JRB	TAL PIT
Instrument ID: CHICS2100B										
Total Recoverable	Prep	3005A			50 mL	50 mL	389899	03/01/22 09:53	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390199	03/02/22 12:06	RSK	TAL PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	390578	03/06/22 10:43	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390860	03/08/22 14:24	KFS	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389966	03/01/22 16:09	JCR	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			390764	02/23/22 12:40	FDS	TAL PIT
Instrument ID: NOEQUIP										

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: EB-2**

**Lab Sample ID: 180-134317-3**

**Date Collected: 02/23/22 14:40**

**Matrix: Water**

**Date Received: 02/26/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			390542	03/06/22 01:03	JRB	TAL PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	389899	03/01/22 09:53	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390199	03/02/22 12:09	RSK	TAL PIT
Instrument ID: DORY										
Total/NA	Prep	7470A			25 mL	25 mL	390578	03/06/22 10:43	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			390860	03/08/22 14:25	KFS	TAL PIT
Instrument ID: HGY										
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	389842	02/28/22 17:28	JCR	TAL PIT
Instrument ID: NOEQUIP										

**Laboratory References:**

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

**Analyst References:**

Lab: TAL PIT

Batch Type: Prep

KEM = Kimberly Mahoney

RGM = Rebecca Manns

RJR = Ron Rosenbaum

Batch Type: Analysis

FDS = Sampler Field

JCR = Jessica Rodgers

JRB = James Burzio

KFS = Kelly Shannon

RJR = Ron Rosenbaum

RSK = Robert Kurtz

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: DUP-1**  
 Date Collected: 02/22/22 00:01  
 Date Received: 02/24/22 12:30

**Lab Sample ID: 180-134223-1**  
 Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>3.0</b>		1.0	0.71	mg/L			02/26/22 16:49	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 16:49	1
<b>Sulfate</b>	<b>0.94</b>	<b>J</b>	1.0	0.76	mg/L			02/26/22 16:49	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/01/22 23:30	1
<b>Arsenic</b>	<b>0.0025</b>		0.0010	0.00028	mg/L		02/28/22 11:38	03/01/22 23:30	1
<b>Barium</b>	<b>0.14</b>		0.010	0.0031	mg/L		02/28/22 11:38	03/01/22 23:30	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/01/22 23:30	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 09:57	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/01/22 23:30	1
<b>Calcium</b>	<b>37</b>		0.50	0.13	mg/L		02/28/22 11:38	03/01/22 23:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/01/22 23:30	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/01/22 23:30	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/01/22 23:30	1
<b>Lithium</b>	<b>0.027</b>		0.0050	0.00083	mg/L		02/28/22 11:38	03/01/22 23:30	1
<b>Molybdenum</b>	<b>0.0011</b>	<b>J</b>	0.015	0.00061	mg/L		02/28/22 11:38	03/01/22 23:30	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/01/22 23:30	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/01/22 23:30	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 14:55	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>220</b>		10	10	mg/L			02/28/22 17:18	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWA-10**

**Lab Sample ID: 180-134223-2**

Date Collected: 02/22/22 10:31

Matrix: Water

Date Received: 02/24/22 12:30

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>7.1</b>		1.0	0.71	mg/L			02/26/22 18:04	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 18:04	1
Sulfate	<0.76		1.0	0.76	mg/L			02/26/22 18:04	1

### Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/01/22 23:34	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/28/22 11:38	03/01/22 23:34	1
<b>Barium</b>	<b>0.022</b>		0.010	0.0031	mg/L		02/28/22 11:38	03/01/22 23:34	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/01/22 23:34	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:00	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/01/22 23:34	1
<b>Calcium</b>	<b>3.3</b>		0.50	0.13	mg/L		02/28/22 11:38	03/01/22 23:34	1
<b>Chromium</b>	<b>0.0039</b>		0.0020	0.0015	mg/L		02/28/22 11:38	03/01/22 23:34	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/01/22 23:34	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/01/22 23:34	1
<b>Lithium</b>	<b>0.0079</b>		0.0050	0.00083	mg/L		02/28/22 11:38	03/01/22 23:34	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/28/22 11:38	03/01/22 23:34	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/01/22 23:34	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/01/22 23:34	1

### Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 14:56	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>38</b>		10	10	mg/L			02/28/22 17:18	1

### Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>5.38</b>				SU			02/22/22 10:31	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWA-11**

**Lab Sample ID: 180-134223-3**

Date Collected: 02/22/22 13:45

Matrix: Water

Date Received: 02/24/22 12:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>3.1</b>		1.0	0.71	mg/L			02/26/22 18:29	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 18:29	1
<b>Sulfate</b>	<b>1.1</b>		1.0	0.76	mg/L			02/26/22 18:29	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/01/22 23:52	1
<b>Arsenic</b>	<b>0.0024</b>		0.0010	0.00028	mg/L		02/28/22 11:38	03/01/22 23:52	1
<b>Barium</b>	<b>0.13</b>		0.010	0.0031	mg/L		02/28/22 11:38	03/01/22 23:52	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/01/22 23:52	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/01/22 23:52	1
<b>Calcium</b>	<b>36</b>		0.50	0.13	mg/L		02/28/22 11:38	03/01/22 23:52	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/01/22 23:52	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/01/22 23:52	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/01/22 23:52	1
<b>Lithium</b>	<b>0.027</b>		0.0050	0.00083	mg/L		02/28/22 11:38	03/01/22 23:52	1
<b>Molybdenum</b>	<b>0.0010 J</b>		0.015	0.00061	mg/L		02/28/22 11:38	03/01/22 23:52	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/01/22 23:52	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/01/22 23:52	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 14:57	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>210</b>		10	10	mg/L			02/28/22 17:18	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>7.60</b>				SU			02/22/22 13:45	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-1**

**Lab Sample ID: 180-134223-4**

Date Collected: 02/22/22 16:05

Matrix: Water

Date Received: 02/24/22 12:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.71	mg/L			02/26/22 18:54	1
Fluoride	0.047	J	0.10	0.026	mg/L			02/26/22 18:54	1
Sulfate	150		1.0	0.76	mg/L			02/26/22 18:54	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/01/22 23:55	1
Arsenic	0.0014		0.0010	0.00028	mg/L		02/28/22 11:38	03/01/22 23:55	1
Barium	0.11		0.010	0.0031	mg/L		02/28/22 11:38	03/01/22 23:55	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/01/22 23:55	1
Boron	1.7		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:22	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/01/22 23:55	1
Calcium	100		0.50	0.13	mg/L		02/28/22 11:38	03/01/22 23:55	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/01/22 23:55	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/01/22 23:55	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/01/22 23:55	1
Lithium	0.010		0.0050	0.00083	mg/L		02/28/22 11:38	03/01/22 23:55	1
Molybdenum	0.0014	J	0.015	0.00061	mg/L		02/28/22 11:38	03/01/22 23:55	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/01/22 23:55	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/01/22 23:55	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 14:58	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	420		10	10	mg/L			02/28/22 17:18	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.32				SU			02/22/22 16:05	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: FB-1**

**Lab Sample ID: 180-134223-5**

Date Collected: 02/22/22 15:30

Matrix: Water

Date Received: 02/24/22 12:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/26/22 19:44	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 19:44	1
Sulfate	<0.76		1.0	0.76	mg/L			02/26/22 19:44	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/02/22 00:06	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/28/22 11:38	03/02/22 00:06	1
Barium	<0.0031		0.010	0.0031	mg/L		02/28/22 11:38	03/02/22 00:06	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/02/22 00:06	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:25	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/02/22 00:06	1
Calcium	<0.13		0.50	0.13	mg/L		02/28/22 11:38	03/02/22 00:06	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/02/22 00:06	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/02/22 00:06	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/02/22 00:06	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/28/22 11:38	03/02/22 00:06	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/28/22 11:38	03/02/22 00:06	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/02/22 00:06	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/02/22 00:06	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 14:59	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/28/22 17:18	1



# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWA-6A**

**Lab Sample ID: 180-134223-6**

Date Collected: 02/22/22 11:05

Matrix: Water

Date Received: 02/24/22 12:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>3.3</b>		1.0	0.71	mg/L			02/26/22 20:59	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 20:59	1
<b>Sulfate</b>	<b>2.1</b>		1.0	0.76	mg/L			02/26/22 20:59	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/02/22 00:10	1
<b>Arsenic</b>	<b>0.013</b>		0.0010	0.00028	mg/L		02/28/22 11:38	03/02/22 00:10	1
<b>Barium</b>	<b>0.034</b>		0.010	0.0031	mg/L		02/28/22 11:38	03/02/22 00:10	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/02/22 00:10	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:27	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/02/22 00:10	1
<b>Calcium</b>	<b>90</b>		0.50	0.13	mg/L		02/28/22 11:38	03/02/22 00:10	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/02/22 00:10	1
<b>Cobalt</b>	<b>0.00049 J</b>		0.0025	0.00026	mg/L		02/28/22 11:38	03/02/22 00:10	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/02/22 00:10	1
<b>Lithium</b>	<b>0.0012 J</b>		0.0050	0.00083	mg/L		02/28/22 11:38	03/02/22 00:10	1
<b>Molybdenum</b>	<b>0.00078 J</b>		0.015	0.00061	mg/L		02/28/22 11:38	03/02/22 00:10	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/02/22 00:10	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/02/22 00:10	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 15:00	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>270</b>		10	10	mg/L			02/28/22 17:18	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>7.20</b>				SU			02/22/22 11:05	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWA-6**

**Lab Sample ID: 180-134223-7**

Date Collected: 02/22/22 12:15

Matrix: Water

Date Received: 02/24/22 12:30

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.0		1.0	0.71	mg/L			02/26/22 21:23	1
Fluoride	0.034	J	0.10	0.026	mg/L			02/26/22 21:23	1
Sulfate	5.4		1.0	0.76	mg/L			02/26/22 21:23	1

### Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/02/22 00:13	1
Arsenic	0.011		0.0010	0.00028	mg/L		02/28/22 11:38	03/02/22 00:13	1
Barium	0.030		0.010	0.0031	mg/L		02/28/22 11:38	03/02/22 00:13	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/02/22 00:13	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:30	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/02/22 00:13	1
Calcium	97		0.50	0.13	mg/L		02/28/22 11:38	03/02/22 00:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/02/22 00:13	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/02/22 00:13	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/02/22 00:13	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/28/22 11:38	03/02/22 00:13	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/28/22 11:38	03/02/22 00:13	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/02/22 00:13	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/02/22 00:13	1

### Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 15:04	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	300		10	10	mg/L			02/28/22 17:18	1

### Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.14				SU			02/22/22 12:15	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWA-5**

**Lab Sample ID: 180-134223-8**

Date Collected: 02/22/22 13:32

Matrix: Water

Date Received: 02/24/22 12:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>5.1</b>		1.0	0.71	mg/L			02/26/22 23:28	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 23:28	1
<b>Sulfate</b>	<b>3.2</b>		1.0	0.76	mg/L			02/26/22 23:28	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/02/22 00:17	1
<b>Arsenic</b>	<b>0.00052</b>	<b>J</b>	0.0010	0.00028	mg/L		02/28/22 11:38	03/02/22 00:17	1
<b>Barium</b>	<b>0.038</b>		0.010	0.0031	mg/L		02/28/22 11:38	03/02/22 00:17	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/02/22 00:17	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:33	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/02/22 00:17	1
<b>Calcium</b>	<b>25</b>		0.50	0.13	mg/L		02/28/22 11:38	03/02/22 00:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/02/22 00:17	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/02/22 00:17	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/02/22 00:17	1
<b>Lithium</b>	<b>0.011</b>		0.0050	0.00083	mg/L		02/28/22 11:38	03/02/22 00:17	1
<b>Molybdenum</b>	<b>0.00091</b>	<b>J</b>	0.015	0.00061	mg/L		02/28/22 11:38	03/02/22 00:17	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/02/22 00:17	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/02/22 00:17	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 15:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>150</b>		10	10	mg/L			02/28/22 17:18	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>pH</b>	<b>7.57</b>				SU			02/22/22 13:32	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: EB-1**

**Lab Sample ID: 180-134223-9**

Date Collected: 02/22/22 13:40

Matrix: Water

Date Received: 02/24/22 12:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/26/22 21:48	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 21:48	1
Sulfate	<0.76		1.0	0.76	mg/L			02/26/22 21:48	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/02/22 00:21	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/28/22 11:38	03/02/22 00:21	1
Barium	<0.0031		0.010	0.0031	mg/L		02/28/22 11:38	03/02/22 00:21	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/02/22 00:21	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/02/22 00:21	1
Calcium	<0.13		0.50	0.13	mg/L		02/28/22 11:38	03/02/22 00:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/02/22 00:21	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/02/22 00:21	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/02/22 00:21	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/28/22 11:38	03/02/22 00:21	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/28/22 11:38	03/02/22 00:21	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/02/22 00:21	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/02/22 00:21	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 15:06	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/28/22 17:18	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-12**

**Lab Sample ID: 180-134223-10**

Date Collected: 02/22/22 15:00

Matrix: Water

Date Received: 02/24/22 12:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.0		1.0	0.71	mg/L			02/26/22 22:13	1
Fluoride	0.093	J	0.10	0.026	mg/L			02/26/22 22:13	1
Sulfate	4.8		1.0	0.76	mg/L			02/26/22 22:13	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/02/22 00:24	1
Arsenic	0.00089	J	0.0010	0.00028	mg/L		02/28/22 11:38	03/02/22 00:24	1
Barium	0.067		0.010	0.0031	mg/L		02/28/22 11:38	03/02/22 00:24	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/02/22 00:24	1
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 10:38	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/02/22 00:24	1
Calcium	35		0.50	0.13	mg/L		02/28/22 11:38	03/02/22 00:24	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/02/22 00:24	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/02/22 00:24	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/02/22 00:24	1
Lithium	0.022		0.0050	0.00083	mg/L		02/28/22 11:38	03/02/22 00:24	1
Molybdenum	0.00064	J	0.015	0.00061	mg/L		02/28/22 11:38	03/02/22 00:24	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/02/22 00:24	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/02/22 00:24	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 15:08	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10	10	mg/L			02/28/22 17:18	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.41				SU			02/22/22 15:00	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-2**

**Lab Sample ID: 180-134315-1**

Date Collected: 02/23/22 09:50

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.71	mg/L			03/05/22 04:39	1
Fluoride	0.075	J	0.10	0.026	mg/L			03/05/22 04:39	1
Sulfate	180		1.0	0.76	mg/L			03/05/22 04:39	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:50	03/02/22 14:09	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		03/01/22 09:50	03/02/22 14:09	1
Barium	0.046		0.010	0.0031	mg/L		03/01/22 09:50	03/02/22 14:09	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:50	03/02/22 14:09	1
Boron	2.0		0.080	0.060	mg/L		03/01/22 09:50	03/02/22 14:09	1
Cadmium	0.0039		0.0025	0.00022	mg/L		03/01/22 09:50	03/02/22 14:09	1
Calcium	100		0.50	0.13	mg/L		03/01/22 09:50	03/02/22 14:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:50	03/02/22 14:09	1
Cobalt	0.0016	J	0.0025	0.00026	mg/L		03/01/22 09:50	03/02/22 14:09	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:50	03/02/22 14:09	1
Lithium	0.0066		0.0050	0.00083	mg/L		03/01/22 09:50	03/02/22 14:09	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:50	03/02/22 14:09	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:50	03/02/22 14:09	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:50	03/02/22 14:09	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	490		10	10	mg/L			02/28/22 17:34	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.44				SU			02/23/22 09:50	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-7**

**Lab Sample ID: 180-134315-2**

Date Collected: 02/23/22 11:25

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.8		1.0	0.71	mg/L			02/28/22 17:28	1
Fluoride	0.22		0.10	0.026	mg/L			02/28/22 17:28	1
Sulfate	260		5.0	3.8	mg/L			03/01/22 21:23	5

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:50	03/02/22 14:13	1
Arsenic	0.00040	J	0.0010	0.00028	mg/L		03/01/22 09:50	03/02/22 14:13	1
Barium	0.014		0.010	0.0031	mg/L		03/01/22 09:50	03/02/22 14:13	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:50	03/02/22 14:13	1
Boron	2.1		0.080	0.060	mg/L		03/01/22 09:50	03/02/22 14:13	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/01/22 09:50	03/02/22 14:13	1
Calcium	61		0.50	0.13	mg/L		03/01/22 09:50	03/02/22 14:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:50	03/02/22 14:13	1
Cobalt	0.0070		0.0025	0.00026	mg/L		03/01/22 09:50	03/02/22 14:13	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:50	03/02/22 14:13	1
Lithium	0.13		0.0050	0.00083	mg/L		03/01/22 09:50	03/02/22 14:13	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:50	03/02/22 14:13	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:50	03/02/22 14:13	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:50	03/02/22 14:13	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:20	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	390		10	10	mg/L			03/01/22 16:09	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.91				SU			02/23/22 11:25	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: FB-2**

**Lab Sample ID: 180-134315-3**

Date Collected: 02/23/22 14:55

Matrix: Water

Date Received: 02/26/22 10:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/28/22 17:42	1
<b>Fluoride</b>	<b>0.029</b>	<b>J</b>	0.10	0.026	mg/L			02/28/22 17:42	1
Sulfate	<0.76		1.0	0.76	mg/L			02/28/22 17:42	1

### Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:50	03/02/22 14:17	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		03/01/22 09:50	03/02/22 14:17	1
Barium	<0.0031		0.010	0.0031	mg/L		03/01/22 09:50	03/02/22 14:17	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:50	03/02/22 14:17	1
Boron	<0.060		0.080	0.060	mg/L		03/01/22 09:50	04/01/22 08:40	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/01/22 09:50	03/02/22 14:17	1
Calcium	<0.13		0.50	0.13	mg/L		03/01/22 09:50	03/02/22 14:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:50	03/02/22 14:17	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		03/01/22 09:50	03/02/22 14:17	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:50	03/02/22 14:17	1
Lithium	<0.00083		0.0050	0.00083	mg/L		03/01/22 09:50	03/02/22 14:17	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:50	03/02/22 14:17	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:50	03/02/22 14:17	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:50	03/02/22 14:17	1

### Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:21	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/01/22 16:09	1



# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-8**

**Lab Sample ID: 180-134315-4**

Date Collected: 02/23/22 15:50

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		1.0	0.71	mg/L			02/28/22 18:36	1
Fluoride	0.050	J	0.10	0.026	mg/L			03/20/22 02:40	1
Sulfate	390		5.0	3.8	mg/L			02/28/22 18:50	5

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:50	03/02/22 14:27	1
Arsenic	0.00044	J	0.0010	0.00028	mg/L		03/01/22 09:50	03/02/22 14:27	1
Barium	0.036		0.010	0.0031	mg/L		03/01/22 09:50	03/02/22 14:27	1
Beryllium	0.0014	J	0.0025	0.00027	mg/L		03/01/22 09:50	03/02/22 14:27	1
Boron	4.1		0.080	0.060	mg/L		03/01/22 09:50	03/02/22 14:27	1
Cadmium	0.0014	J	0.0025	0.00022	mg/L		03/01/22 09:50	03/02/22 14:27	1
Calcium	97		0.50	0.13	mg/L		03/01/22 09:50	03/02/22 14:27	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:50	03/02/22 14:27	1
Cobalt	0.015		0.0025	0.00026	mg/L		03/01/22 09:50	03/02/22 14:27	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:50	03/02/22 14:27	1
Lithium	0.028		0.0050	0.00083	mg/L		03/01/22 09:50	03/02/22 14:27	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:50	03/02/22 14:27	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:50	03/02/22 14:27	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:50	03/02/22 14:27	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00028		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:22	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	630		10	10	mg/L			03/01/22 16:09	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.22				SU			02/23/22 15:50	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: DUP-2**

**Lab Sample ID: 180-134317-1**

Date Collected: 02/23/22 00:01

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.71	mg/L			02/28/22 19:17	1
Fluoride	0.095	J	0.10	0.026	mg/L			03/01/22 21:36	1
Sulfate	130		1.0	0.76	mg/L			02/28/22 19:17	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:53	03/02/22 12:02	1
Arsenic	0.0016		0.0010	0.00028	mg/L		03/01/22 09:53	03/02/22 12:02	1
Barium	0.17		0.010	0.0031	mg/L		03/01/22 09:53	03/02/22 12:02	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:53	03/02/22 12:02	1
Boron	0.82		0.080	0.060	mg/L		03/01/22 09:53	03/02/22 12:02	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/01/22 09:53	03/02/22 12:02	1
Calcium	120		0.50	0.13	mg/L		03/01/22 09:53	03/02/22 12:02	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:53	03/02/22 12:02	1
Cobalt	0.00096	J	0.0025	0.00026	mg/L		03/01/22 09:53	03/02/22 12:02	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:53	03/02/22 12:02	1
Lithium	0.013		0.0050	0.00083	mg/L		03/01/22 09:53	03/02/22 12:02	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:53	03/02/22 12:02	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:53	03/02/22 12:02	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:53	03/02/22 12:02	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	430		10	10	mg/L			03/01/22 16:09	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: MGWC-3**

**Lab Sample ID: 180-134317-2**

Date Collected: 02/23/22 12:40

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		1.0	0.71	mg/L			02/28/22 19:45	1
Fluoride	0.086	J	0.10	0.026	mg/L			03/01/22 21:50	1
Sulfate	150		1.0	0.76	mg/L			02/28/22 19:45	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:53	03/02/22 12:06	1
Arsenic	0.0016		0.0010	0.00028	mg/L		03/01/22 09:53	03/02/22 12:06	1
Barium	0.17		0.010	0.0031	mg/L		03/01/22 09:53	03/02/22 12:06	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:53	03/02/22 12:06	1
Boron	0.83		0.080	0.060	mg/L		03/01/22 09:53	03/02/22 12:06	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/01/22 09:53	03/02/22 12:06	1
Calcium	120		0.50	0.13	mg/L		03/01/22 09:53	03/02/22 12:06	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:53	03/02/22 12:06	1
Cobalt	0.0012	J	0.0025	0.00026	mg/L		03/01/22 09:53	03/02/22 12:06	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:53	03/02/22 12:06	1
Lithium	0.013		0.0050	0.00083	mg/L		03/01/22 09:53	03/02/22 12:06	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:53	03/02/22 12:06	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:53	03/02/22 12:06	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:53	03/02/22 12:06	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:24	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	450		10	10	mg/L			03/01/22 16:09	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.98				SU			02/23/22 12:40	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

**Client Sample ID: EB-2**

**Lab Sample ID: 180-134317-3**

Date Collected: 02/23/22 14:40

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			03/06/22 01:03	1
Fluoride	<0.026		0.10	0.026	mg/L			03/06/22 01:03	1
Sulfate	<0.76		1.0	0.76	mg/L			03/06/22 01:03	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:53	03/02/22 12:09	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		03/01/22 09:53	03/02/22 12:09	1
Barium	<0.0031		0.010	0.0031	mg/L		03/01/22 09:53	03/02/22 12:09	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:53	03/02/22 12:09	1
<b>Boron</b>	<b>0.062 J</b>		0.080	0.060	mg/L		03/01/22 09:53	03/02/22 12:09	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/01/22 09:53	03/02/22 12:09	1
Calcium	<0.13		0.50	0.13	mg/L		03/01/22 09:53	03/02/22 12:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:53	03/02/22 12:09	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		03/01/22 09:53	03/02/22 12:09	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:53	03/02/22 12:09	1
Lithium	<0.00083		0.0050	0.00083	mg/L		03/01/22 09:53	03/02/22 12:09	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:53	03/02/22 12:09	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:53	03/02/22 12:09	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:53	03/02/22 12:09	1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:25	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/28/22 17:28	1

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID: MB 180-389675/7**  
**Matrix: Water**  
**Analysis Batch: 389675**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/26/22 13:35	1
Fluoride	<0.026		0.10	0.026	mg/L			02/26/22 13:35	1
Sulfate	<0.76		1.0	0.76	mg/L			02/26/22 13:35	1

**Lab Sample ID: LCS 180-389675/6**  
**Matrix: Water**  
**Analysis Batch: 389675**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.5		mg/L		99	90 - 110
Fluoride	2.50	2.39		mg/L		96	90 - 110
Sulfate	50.0	50.1		mg/L		100	90 - 110

**Lab Sample ID: 180-134223-1 MS**  
**Matrix: Water**  
**Analysis Batch: 389675**

**Client Sample ID: DUP-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	3.0		50.0	51.5		mg/L		97	90 - 110
Fluoride	<0.026		2.50	2.35		mg/L		94	90 - 110
Sulfate	0.94	J	50.0	50.1		mg/L		98	90 - 110

**Lab Sample ID: 180-134223-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 389675**

**Client Sample ID: DUP-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.0		50.0	51.5		mg/L		97	90 - 110	0	20
Fluoride	<0.026		2.50	2.38		mg/L		95	90 - 110	1	20
Sulfate	0.94	J	50.0	50.4		mg/L		99	90 - 110	1	20

**Lab Sample ID: 180-134223-8 MS**  
**Matrix: Water**  
**Analysis Batch: 389675**

**Client Sample ID: MGWA-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.1		50.0	53.1		mg/L		96	90 - 110
Fluoride	<0.026		2.50	2.39		mg/L		96	90 - 110
Sulfate	3.2		50.0	52.2		mg/L		98	90 - 110

**Lab Sample ID: 180-134223-8 MSD**  
**Matrix: Water**  
**Analysis Batch: 389675**

**Client Sample ID: MGWA-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.1		50.0	53.0		mg/L		96	90 - 110	0	20
Fluoride	<0.026		2.50	2.42		mg/L		97	90 - 110	1	20
Sulfate	3.2		50.0	52.4		mg/L		98	90 - 110	0	20

Eurofins Pittsburgh

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: MB 180-389764/7**  
**Matrix: Water**  
**Analysis Batch: 389764**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/28/22 12:10	1
Fluoride	<0.026		0.10	0.026	mg/L			02/28/22 12:10	1
Sulfate	<0.76		1.0	0.76	mg/L			02/28/22 12:10	1

**Lab Sample ID: LCS 180-389764/6**  
**Matrix: Water**  
**Analysis Batch: 389764**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.1		mg/L		102	90 - 110
Fluoride	2.50	2.68		mg/L		107	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

**Lab Sample ID: MB 180-389894/7**  
**Matrix: Water**  
**Analysis Batch: 389894**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			03/01/22 13:17	1
Fluoride	<0.026		0.10	0.026	mg/L			03/01/22 13:17	1
Sulfate	<0.76		1.0	0.76	mg/L			03/01/22 13:17	1

**Lab Sample ID: LCS 180-389894/6**  
**Matrix: Water**  
**Analysis Batch: 389894**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	95.0		mg/L		95	90 - 110
Fluoride	5.00	4.79		mg/L		96	90 - 110
Sulfate	100	89.8		mg/L		90	90 - 110

**Lab Sample ID: MB 180-390373/50**  
**Matrix: Water**  
**Analysis Batch: 390373**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			03/05/22 03:04	1
Fluoride	<0.026		0.10	0.026	mg/L			03/05/22 03:04	1
Sulfate	<0.76		1.0	0.76	mg/L			03/05/22 03:04	1

**Lab Sample ID: LCS 180-390373/49**  
**Matrix: Water**  
**Analysis Batch: 390373**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.2		mg/L		100	90 - 110
Fluoride	2.50	2.64		mg/L		105	90 - 110
Sulfate	50.0	50.7		mg/L		101	90 - 110

Eurofins Pittsburgh

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: MB 180-390542/38**  
**Matrix: Water**  
**Analysis Batch: 390542**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			03/05/22 21:55	1
Fluoride	<0.026		0.10	0.026	mg/L			03/05/22 21:55	1
Sulfate	<0.76		1.0	0.76	mg/L			03/05/22 21:55	1

**Lab Sample ID: LCS 180-390542/37**  
**Matrix: Water**  
**Analysis Batch: 390542**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.9		mg/L		100	90 - 110
Fluoride	2.50	2.55		mg/L		102	90 - 110
Sulfate	50.0	50.4		mg/L		101	90 - 110

**Lab Sample ID: MB 180-392317/54**  
**Matrix: Water**  
**Analysis Batch: 392317**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			03/20/22 00:59	1
Fluoride	<0.026		0.10	0.026	mg/L			03/20/22 00:59	1
Sulfate	<0.76		1.0	0.76	mg/L			03/20/22 00:59	1

**Lab Sample ID: LCS 180-392317/53**  
**Matrix: Water**  
**Analysis Batch: 392317**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	52.7		mg/L		105	90 - 110
Fluoride	2.50	2.66		mg/L		106	90 - 110
Sulfate	50.0	52.5		mg/L		105	90 - 110

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-389786/1-A**  
**Matrix: Water**  
**Analysis Batch: 390021**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/28/22 11:38	03/01/22 23:08	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/28/22 11:38	03/01/22 23:08	1
Barium	<0.0031		0.010	0.0031	mg/L		02/28/22 11:38	03/01/22 23:08	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/28/22 11:38	03/01/22 23:08	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/28/22 11:38	03/01/22 23:08	1
Calcium	<0.13		0.50	0.13	mg/L		02/28/22 11:38	03/01/22 23:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/28/22 11:38	03/01/22 23:08	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/28/22 11:38	03/01/22 23:08	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/28/22 11:38	03/01/22 23:08	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/28/22 11:38	03/01/22 23:08	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/28/22 11:38	03/01/22 23:08	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/28/22 11:38	03/01/22 23:08	1

Eurofins Pittsburgh

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: MB 180-389786/1-A**  
**Matrix: Water**  
**Analysis Batch: 390021**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.00047		0.0010	0.00047	mg/L		02/28/22 11:38	03/01/22 23:08	1

**Lab Sample ID: MB 180-389786/1-A**  
**Matrix: Water**  
**Analysis Batch: 390093**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/28/22 11:38	03/02/22 09:42	1

**Lab Sample ID: LCS 180-389786/2-A**  
**Matrix: Water**  
**Analysis Batch: 390021**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.250	0.259		mg/L		104	80 - 120
Arsenic	1.00	0.953		mg/L		95	80 - 120
Barium	1.00	1.04		mg/L		104	80 - 120
Beryllium	0.500	0.490		mg/L		98	80 - 120
Cadmium	0.500	0.502		mg/L		100	80 - 120
Calcium	25.0	25.4		mg/L		102	80 - 120
Chromium	0.500	0.518		mg/L		104	80 - 120
Cobalt	0.500	0.481		mg/L		96	80 - 120
Lead	0.500	0.515		mg/L		103	80 - 120
Lithium	0.500	0.516		mg/L		103	80 - 120
Molybdenum	0.500	0.510		mg/L		102	80 - 120
Selenium	1.00	1.04		mg/L		104	80 - 120
Thallium	1.00	1.08		mg/L		108	80 - 120

**Lab Sample ID: LCS 180-389786/2-A**  
**Matrix: Water**  
**Analysis Batch: 390093**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.25	1.35		mg/L		108	80 - 120

**Lab Sample ID: 180-134223-2 MS**  
**Matrix: Water**  
**Analysis Batch: 390021**

**Client Sample ID: MGWA-10**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00051		0.250	0.255		mg/L		102	75 - 125
Arsenic	<0.00028		1.00	0.917		mg/L		92	75 - 125
Barium	0.022		1.00	1.02		mg/L		100	75 - 125
Beryllium	<0.00027		0.500	0.471		mg/L		94	75 - 125
Cadmium	<0.00022		0.500	0.483		mg/L		97	75 - 125
Calcium	3.3		25.0	27.5		mg/L		97	75 - 125
Chromium	0.0039		0.500	0.513		mg/L		102	75 - 125
Cobalt	<0.00026		0.500	0.467		mg/L		93	75 - 125
Lead	<0.00017		0.500	0.498		mg/L		100	75 - 125
Lithium	0.0079		0.500	0.490		mg/L		96	75 - 125

Eurofins Pittsburgh



# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: 180-134223-2 MS**  
**Matrix: Water**  
**Analysis Batch: 390021**

**Client Sample ID: MGWA-10**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	<0.00061		0.500	0.497		mg/L		99	75 - 125
Selenium	<0.00074		1.00	0.991		mg/L		99	75 - 125
Thallium	<0.00047		1.00	1.05		mg/L		105	75 - 125

**Lab Sample ID: 180-134223-2 MS**  
**Matrix: Water**  
**Analysis Batch: 390093**

**Client Sample ID: MGWA-10**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	<0.060		1.25	1.30		mg/L		104	75 - 125

**Lab Sample ID: 180-134223-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 390021**

**Client Sample ID: MGWA-10**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00051		0.250	0.260		mg/L		104	75 - 125	2	20
Arsenic	<0.00028		1.00	0.926		mg/L		93	75 - 125	1	20
Barium	0.022		1.00	1.05		mg/L		103	75 - 125	3	20
Beryllium	<0.00027		0.500	0.482		mg/L		96	75 - 125	2	20
Cadmium	<0.00022		0.500	0.498		mg/L		100	75 - 125	3	20
Calcium	3.3		25.0	27.8		mg/L		98	75 - 125	1	20
Chromium	0.0039		0.500	0.521		mg/L		103	75 - 125	2	20
Cobalt	<0.00026		0.500	0.469		mg/L		94	75 - 125	0	20
Lead	<0.00017		0.500	0.508		mg/L		102	75 - 125	2	20
Lithium	0.0079		0.500	0.518		mg/L		102	75 - 125	6	20
Molybdenum	<0.00061		0.500	0.499		mg/L		100	75 - 125	0	20
Selenium	<0.00074		1.00	1.02		mg/L		102	75 - 125	3	20
Thallium	<0.00047		1.00	1.07		mg/L		107	75 - 125	2	20

**Lab Sample ID: 180-134223-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 390093**

**Client Sample ID: MGWA-10**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389786**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	<0.060		1.25	1.26		mg/L		100	75 - 125	4	20

**Lab Sample ID: MB 180-389898/1-A**  
**Matrix: Water**  
**Analysis Batch: 390197**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389898**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.000563	J	0.0020	0.00051	mg/L		03/01/22 09:50	03/02/22 12:35	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		03/01/22 09:50	03/02/22 12:35	1
Barium	<0.0031		0.010	0.0031	mg/L		03/01/22 09:50	03/02/22 12:35	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:50	03/02/22 12:35	1
Boron	<0.060		0.080	0.060	mg/L		03/01/22 09:50	03/02/22 12:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/01/22 09:50	03/02/22 12:35	1
Calcium	<0.13		0.50	0.13	mg/L		03/01/22 09:50	03/02/22 12:35	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:50	03/02/22 12:35	1

Eurofins Pittsburgh

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: MB 180-389898/1-A**  
**Matrix: Water**  
**Analysis Batch: 390197**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389898**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00026		0.0025	0.00026	mg/L		03/01/22 09:50	03/02/22 12:35	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:50	03/02/22 12:35	1
Lithium	<0.00083		0.0050	0.00083	mg/L		03/01/22 09:50	03/02/22 12:35	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:50	03/02/22 12:35	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:50	03/02/22 12:35	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:50	03/02/22 12:35	1

**Lab Sample ID: LCS 180-389898/2-A**  
**Matrix: Water**  
**Analysis Batch: 390197**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389898**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.250	0.246		mg/L		98	80 - 120
Arsenic	1.00	0.964		mg/L		96	80 - 120
Barium	1.00	0.981		mg/L		98	80 - 120
Beryllium	0.500	0.513		mg/L		103	80 - 120
Boron	1.25	1.16		mg/L		93	80 - 120
Cadmium	0.500	0.495		mg/L		99	80 - 120
Calcium	25.0	25.5		mg/L		102	80 - 120
Chromium	0.500	0.489		mg/L		98	80 - 120
Cobalt	0.500	0.490		mg/L		98	80 - 120
Lead	0.500	0.495		mg/L		99	80 - 120
Lithium	0.500	0.482		mg/L		96	80 - 120
Molybdenum	0.500	0.492		mg/L		98	80 - 120
Selenium	1.00	0.974		mg/L		97	80 - 120
Thallium	1.00	1.03		mg/L		103	80 - 120

**Lab Sample ID: MB 180-389899/1-A**  
**Matrix: Water**  
**Analysis Batch: 390199**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389899**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		03/01/22 09:53	03/02/22 11:34	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		03/01/22 09:53	03/02/22 11:34	1
Barium	<0.0031		0.010	0.0031	mg/L		03/01/22 09:53	03/02/22 11:34	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		03/01/22 09:53	03/02/22 11:34	1
Boron	<0.060		0.080	0.060	mg/L		03/01/22 09:53	03/02/22 11:34	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/01/22 09:53	03/02/22 11:34	1
Calcium	<0.13		0.50	0.13	mg/L		03/01/22 09:53	03/02/22 11:34	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/01/22 09:53	03/02/22 11:34	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		03/01/22 09:53	03/02/22 11:34	1
Lead	<0.00017		0.0010	0.00017	mg/L		03/01/22 09:53	03/02/22 11:34	1
Lithium	<0.00083		0.0050	0.00083	mg/L		03/01/22 09:53	03/02/22 11:34	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/01/22 09:53	03/02/22 11:34	1
Selenium	<0.00074		0.0050	0.00074	mg/L		03/01/22 09:53	03/02/22 11:34	1
Thallium	<0.00047		0.0010	0.00047	mg/L		03/01/22 09:53	03/02/22 11:34	1

Eurofins Pittsburgh

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 180-389899/2-A**  
**Matrix: Water**  
**Analysis Batch: 390199**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389899**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Antimony	0.250	0.237		mg/L		95	80 - 120	
Arsenic	1.00	0.947		mg/L		95	80 - 120	
Barium	1.00	0.960		mg/L		96	80 - 120	
Beryllium	0.500	0.498		mg/L		100	80 - 120	
Boron	1.25	1.22		mg/L		98	80 - 120	
Cadmium	0.500	0.480		mg/L		96	80 - 120	
Calcium	25.0	27.5		mg/L		110	80 - 120	
Chromium	0.500	0.485		mg/L		97	80 - 120	
Cobalt	0.500	0.481		mg/L		96	80 - 120	
Lead	0.500	0.488		mg/L		98	80 - 120	
Lithium	0.500	0.474		mg/L		95	80 - 120	
Molybdenum	0.500	0.491		mg/L		98	80 - 120	
Selenium	1.00	0.943		mg/L		94	80 - 120	
Thallium	1.00	0.989		mg/L		99	80 - 120	

## Method: EPA 7470A - Mercury (CVAA)

**Lab Sample ID: MB 180-390261/1-A**  
**Matrix: Water**  
**Analysis Batch: 390482**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 390261**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00013		0.00020	0.00013	mg/L		03/03/22 11:02	03/04/22 14:45	1

**Lab Sample ID: LCS 180-390261/2-A**  
**Matrix: Water**  
**Analysis Batch: 390482**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 390261**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Mercury	0.00250	0.00282		mg/L		113	80 - 120	

**Lab Sample ID: MB 180-390578/1-A**  
**Matrix: Water**  
**Analysis Batch: 390860**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 390578**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00013		0.00020	0.00013	mg/L		03/06/22 10:43	03/08/22 14:07	1

**Lab Sample ID: LCS 180-390578/2-A**  
**Matrix: Water**  
**Analysis Batch: 390860**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 390578**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Mercury	0.00250	0.00261		mg/L		104	80 - 120	

Eurofins Pittsburgh

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 180-389840/2**  
**Matrix: Water**  
**Analysis Batch: 389840**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/28/22 17:18	1

**Lab Sample ID: LCS 180-389840/1**  
**Matrix: Water**  
**Analysis Batch: 389840**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	469	468		mg/L		100	85 - 115

**Lab Sample ID: 180-134223-1 DU**  
**Matrix: Water**  
**Analysis Batch: 389840**

**Client Sample ID: DUP-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	220		210		mg/L		3	10

**Lab Sample ID: MB 180-389842/2**  
**Matrix: Water**  
**Analysis Batch: 389842**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/28/22 17:28	1

**Lab Sample ID: LCS 180-389842/1**  
**Matrix: Water**  
**Analysis Batch: 389842**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	469	456		mg/L		97	85 - 115

**Lab Sample ID: MB 180-389843/2**  
**Matrix: Water**  
**Analysis Batch: 389843**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/28/22 17:34	1

**Lab Sample ID: LCS 180-389843/1**  
**Matrix: Water**  
**Analysis Batch: 389843**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	469	454		mg/L		97	85 - 115

**Lab Sample ID: 180-134315-1 DU**  
**Matrix: Water**  
**Analysis Batch: 389843**

**Client Sample ID: MGWC-2**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	490		495		mg/L		1	10

Eurofins Pittsburgh

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 180-389966/2**  
**Matrix: Water**  
**Analysis Batch: 389966**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/01/22 16:09	1

**Lab Sample ID: LCS 180-389966/1**  
**Matrix: Water**  
**Analysis Batch: 389966**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	469	456		mg/L		97	85 - 115

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## HPLC/IC

### Analysis Batch: 389675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-134223-2	MGWA-10	Total/NA	Water	EPA 300.0 R2.1	
180-134223-3	MGWA-11	Total/NA	Water	EPA 300.0 R2.1	
180-134223-4	MGWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-134223-5	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-134223-6	MGWA-6A	Total/NA	Water	EPA 300.0 R2.1	
180-134223-7	MGWA-6	Total/NA	Water	EPA 300.0 R2.1	
180-134223-8	MGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-134223-9	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-134223-10	MGWC-12	Total/NA	Water	EPA 300.0 R2.1	
MB 180-389675/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-389675/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-134223-1 MS	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-134223-1 MSD	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-134223-8 MS	MGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-134223-8 MSD	MGWA-5	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 389764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-2	MGWC-7	Total/NA	Water	EPA 300.0 R2.1	
180-134315-3	FB-2	Total/NA	Water	EPA 300.0 R2.1	
180-134315-4	MGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-134315-4	MGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-134317-1	DUP-2	Total/NA	Water	EPA 300.0 R2.1	
180-134317-2	MGWC-3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-389764/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-389764/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 389894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-2	MGWC-7	Total/NA	Water	EPA 300.0 R2.1	
180-134317-1	DUP-2	Total/NA	Water	EPA 300.0 R2.1	
180-134317-2	MGWC-3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-389894/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-389894/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 390373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-1	MGWC-2	Total/NA	Water	EPA 300.0 R2.1	
MB 180-390373/50	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-390373/49	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 390542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134317-3	EB-2	Total/NA	Water	EPA 300.0 R2.1	
MB 180-390542/38	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-390542/37	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 392317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-4	MGWC-8	Total/NA	Water	EPA 300.0 R2.1	

Eurofins Pittsburgh

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## HPLC/IC (Continued)

### Analysis Batch: 392317 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-392317/54	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-392317/53	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 389786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total Recoverable	Water	3005A	
180-134223-2	MGWA-10	Total Recoverable	Water	3005A	
180-134223-3	MGWA-11	Total Recoverable	Water	3005A	
180-134223-4	MGWC-1	Total Recoverable	Water	3005A	
180-134223-5	FB-1	Total Recoverable	Water	3005A	
180-134223-6	MGWA-6A	Total Recoverable	Water	3005A	
180-134223-7	MGWA-6	Total Recoverable	Water	3005A	
180-134223-8	MGWA-5	Total Recoverable	Water	3005A	
180-134223-9	EB-1	Total Recoverable	Water	3005A	
180-134223-10	MGWC-12	Total Recoverable	Water	3005A	
MB 180-389786/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-389786/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-134223-2 MS	MGWA-10	Total Recoverable	Water	3005A	
180-134223-2 MSD	MGWA-10	Total Recoverable	Water	3005A	

### Prep Batch: 389898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-1	MGWC-2	Total Recoverable	Water	3005A	
180-134315-2	MGWC-7	Total Recoverable	Water	3005A	
180-134315-3	FB-2	Total Recoverable	Water	3005A	
180-134315-4	MGWC-8	Total Recoverable	Water	3005A	
MB 180-389898/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-389898/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Prep Batch: 389899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134317-1	DUP-2	Total Recoverable	Water	3005A	
180-134317-2	MGWC-3	Total Recoverable	Water	3005A	
180-134317-3	EB-2	Total Recoverable	Water	3005A	
MB 180-389899/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-389899/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 390021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-2	MGWA-10	Total Recoverable	Water	EPA 6020B	389786
180-134223-3	MGWA-11	Total Recoverable	Water	EPA 6020B	389786
180-134223-4	MGWC-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-5	FB-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-6	MGWA-6A	Total Recoverable	Water	EPA 6020B	389786
180-134223-7	MGWA-6	Total Recoverable	Water	EPA 6020B	389786
180-134223-8	MGWA-5	Total Recoverable	Water	EPA 6020B	389786
180-134223-9	EB-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-10	MGWC-12	Total Recoverable	Water	EPA 6020B	389786

Eurofins Pittsburgh

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Metals (Continued)

### Analysis Batch: 390021 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-389786/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	389786
LCS 180-389786/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	389786
180-134223-2 MS	MGWA-10	Total Recoverable	Water	EPA 6020B	389786
180-134223-2 MSD	MGWA-10	Total Recoverable	Water	EPA 6020B	389786

### Analysis Batch: 390093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-2	MGWA-10	Total Recoverable	Water	EPA 6020B	389786
180-134223-3	MGWA-11	Total Recoverable	Water	EPA 6020B	389786
180-134223-4	MGWC-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-5	FB-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-6	MGWA-6A	Total Recoverable	Water	EPA 6020B	389786
180-134223-7	MGWA-6	Total Recoverable	Water	EPA 6020B	389786
180-134223-8	MGWA-5	Total Recoverable	Water	EPA 6020B	389786
180-134223-9	EB-1	Total Recoverable	Water	EPA 6020B	389786
180-134223-10	MGWC-12	Total Recoverable	Water	EPA 6020B	389786
MB 180-389786/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	389786
LCS 180-389786/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	389786
180-134223-2 MS	MGWA-10	Total Recoverable	Water	EPA 6020B	389786
180-134223-2 MSD	MGWA-10	Total Recoverable	Water	EPA 6020B	389786

### Analysis Batch: 390197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-1	MGWC-2	Total Recoverable	Water	EPA 6020B	389898
180-134315-2	MGWC-7	Total Recoverable	Water	EPA 6020B	389898
180-134315-3	FB-2	Total Recoverable	Water	EPA 6020B	389898
180-134315-4	MGWC-8	Total Recoverable	Water	EPA 6020B	389898
MB 180-389898/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	389898
LCS 180-389898/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	389898

### Analysis Batch: 390199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134317-1	DUP-2	Total Recoverable	Water	EPA 6020B	389899
180-134317-2	MGWC-3	Total Recoverable	Water	EPA 6020B	389899
180-134317-3	EB-2	Total Recoverable	Water	EPA 6020B	389899
MB 180-389899/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	389899
LCS 180-389899/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	389899

### Prep Batch: 390261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total/NA	Water	7470A	
180-134223-2	MGWA-10	Total/NA	Water	7470A	
180-134223-3	MGWA-11	Total/NA	Water	7470A	
180-134223-4	MGWC-1	Total/NA	Water	7470A	
180-134223-5	FB-1	Total/NA	Water	7470A	
180-134223-6	MGWA-6A	Total/NA	Water	7470A	
180-134223-7	MGWA-6	Total/NA	Water	7470A	
180-134223-8	MGWA-5	Total/NA	Water	7470A	
180-134223-9	EB-1	Total/NA	Water	7470A	
180-134223-10	MGWC-12	Total/NA	Water	7470A	

Eurofins Pittsburgh



# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Metals (Continued)

### Prep Batch: 390261 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-390261/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-390261/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Analysis Batch: 390482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total/NA	Water	EPA 7470A	390261
180-134223-2	MGWA-10	Total/NA	Water	EPA 7470A	390261
180-134223-3	MGWA-11	Total/NA	Water	EPA 7470A	390261
180-134223-4	MGWC-1	Total/NA	Water	EPA 7470A	390261
180-134223-5	FB-1	Total/NA	Water	EPA 7470A	390261
180-134223-6	MGWA-6A	Total/NA	Water	EPA 7470A	390261
180-134223-7	MGWA-6	Total/NA	Water	EPA 7470A	390261
180-134223-8	MGWA-5	Total/NA	Water	EPA 7470A	390261
180-134223-9	EB-1	Total/NA	Water	EPA 7470A	390261
180-134223-10	MGWC-12	Total/NA	Water	EPA 7470A	390261
MB 180-390261/1-A	Method Blank	Total/NA	Water	EPA 7470A	390261
LCS 180-390261/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	390261

### Prep Batch: 390578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-1	MGWC-2	Total/NA	Water	7470A	
180-134315-2	MGWC-7	Total/NA	Water	7470A	
180-134315-3	FB-2	Total/NA	Water	7470A	
180-134315-4	MGWC-8	Total/NA	Water	7470A	
180-134317-1	DUP-2	Total/NA	Water	7470A	
180-134317-2	MGWC-3	Total/NA	Water	7470A	
180-134317-3	EB-2	Total/NA	Water	7470A	
MB 180-390578/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-390578/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Analysis Batch: 390860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-1	MGWC-2	Total/NA	Water	EPA 7470A	390578
180-134315-2	MGWC-7	Total/NA	Water	EPA 7470A	390578
180-134315-3	FB-2	Total/NA	Water	EPA 7470A	390578
180-134315-4	MGWC-8	Total/NA	Water	EPA 7470A	390578
180-134317-1	DUP-2	Total/NA	Water	EPA 7470A	390578
180-134317-2	MGWC-3	Total/NA	Water	EPA 7470A	390578
180-134317-3	EB-2	Total/NA	Water	EPA 7470A	390578
MB 180-390578/1-A	Method Blank	Total/NA	Water	EPA 7470A	390578
LCS 180-390578/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	390578

### Analysis Batch: 393913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-3	FB-2	Total Recoverable	Water	EPA 6020B	389898

## General Chemistry

### Analysis Batch: 389840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total/NA	Water	SM 2540C	

Eurofins Pittsburgh

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## General Chemistry (Continued)

### Analysis Batch: 389840 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-2	MGWA-10	Total/NA	Water	SM 2540C	
180-134223-3	MGWA-11	Total/NA	Water	SM 2540C	
180-134223-4	MGWC-1	Total/NA	Water	SM 2540C	
180-134223-5	FB-1	Total/NA	Water	SM 2540C	
180-134223-6	MGWA-6A	Total/NA	Water	SM 2540C	
180-134223-7	MGWA-6	Total/NA	Water	SM 2540C	
180-134223-8	MGWA-5	Total/NA	Water	SM 2540C	
180-134223-9	EB-1	Total/NA	Water	SM 2540C	
180-134223-10	MGWC-12	Total/NA	Water	SM 2540C	
MB 180-389840/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-389840/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-134223-1 DU	DUP-1	Total/NA	Water	SM 2540C	

### Analysis Batch: 389842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134317-3	EB-2	Total/NA	Water	SM 2540C	
MB 180-389842/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-389842/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 389843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-1	MGWC-2	Total/NA	Water	SM 2540C	
MB 180-389843/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-389843/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-134315-1 DU	MGWC-2	Total/NA	Water	SM 2540C	

### Analysis Batch: 389966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-2	MGWC-7	Total/NA	Water	SM 2540C	
180-134315-3	FB-2	Total/NA	Water	SM 2540C	
180-134315-4	MGWC-8	Total/NA	Water	SM 2540C	
180-134317-1	DUP-2	Total/NA	Water	SM 2540C	
180-134317-2	MGWC-3	Total/NA	Water	SM 2540C	
MB 180-389966/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-389966/1	Lab Control Sample	Total/NA	Water	SM 2540C	

## Field Service / Mobile Lab

### Analysis Batch: 390455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-2	MGWA-10	Total/NA	Water	Field Sampling	
180-134223-3	MGWA-11	Total/NA	Water	Field Sampling	
180-134223-4	MGWC-1	Total/NA	Water	Field Sampling	
180-134223-6	MGWA-6A	Total/NA	Water	Field Sampling	
180-134223-7	MGWA-6	Total/NA	Water	Field Sampling	
180-134223-8	MGWA-5	Total/NA	Water	Field Sampling	
180-134223-10	MGWC-12	Total/NA	Water	Field Sampling	

### Analysis Batch: 390665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-1	MGWC-2	Total/NA	Water	Field Sampling	

Eurofins Pittsburgh

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-1

## Field Service / Mobile Lab (Continued)

### Analysis Batch: 390665 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134315-2	MGWC-7	Total/NA	Water	Field Sampling	
180-134315-4	MGWC-8	Total/NA	Water	Field Sampling	

### Analysis Batch: 390764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134317-2	MGWC-3	Total/NA	Water	Field Sampling	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



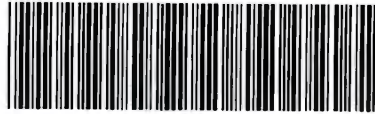
**Eurofins TestAmerica, Pittsburgh**

301 Alpha Drive RIDC Park  
 Pittsburgh, PA 15238  
 Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

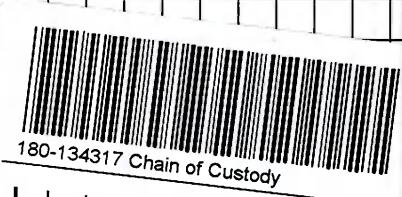


<b>Client Information</b>		Sampler: <u>Hunter Auld</u>		Lab PM: Brown, Shali		Carrier Tracking No(s):		COC No:						
Client Contact:		Phone: <u>770-594-5998</u>		E-Mail: shali.brown@eurofinset.com				Page: <u>2 of 2</u>						
Company: GA Power								Job #:						
Address: 241 Ralph McGill Blvd SE		Due Date Requested:				<b>Analysis Requested</b>		Preservation Codes: A - HCL                    M - Hexane B - NaOH                N - None C - Zn Acetate         O - AsNaO2 D - Nitric Acid         P - Na2O4S E - NaHSO4             Q - Na2SO3 F - MeOH                R - Na2S2O3 G - Amchlor            S - H2SO4 H - Ascorbic Acid      T - TSP Dodecahydrate I - Ice                    U - Acetone J - DI Water            V - MCAA K - EDTA                W - pH 4-5 L - EDA                  Z - other (specify)						
City: Atlanta		TAT Requested (days): <u>Standard</u>												
State, Zip: GA, 30308		PO #:												
Phone: 404-506-7116(Tel)		WO #:												
Email: SCS Contacts								Other: Special Instructions/Note: Full App III plus Detected App IV						
Project Name: Plant McIntosh Ash Pond 1		Project #: 18019956												
Site: Georgia		SSOW#:												
Sample Identification			Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MS (Yes or No)	App. III Metals (B, Ca)	CI, F, SO <sub>4</sub> , TDS (EPA 300.0 & SM 2540C)	App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti)	Radium 226 & 228 (SW-846 9316/9320)	Total Number of containers	
			Preservation Code: <u>D</u> <u>I</u> <u>D</u> <u>D</u>											
<u>MGWA-6A</u>			<u>2-22-22</u>	<u>1105</u>	<u>G</u>	<u>W</u>	<u>N</u>	<u>N</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>4</u>	<u>pH= 7.20</u>
<u>MGWA-6</u>			<u>2-22-22</u>	<u>1215</u>	<u>G</u>	<u>W</u>	<u>N</u>	<u>N</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>4</u>	<u>pH= 7.14</u>
<u>MGWA-5</u>			<u>2-22-22</u>	<u>1332</u>	<u>G</u>	<u>W</u>	<u>N</u>	<u>N</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>4</u>	<u>pH= 7.57</u>
<u>EB-1</u>			<u>2-22-22</u>	<u>1340</u>	<u>G</u>	<u>W</u>	<u>N</u>	<u>N</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>4</u>	<u>pH= N/A</u>
<u>MGWC-12</u>			<u>2-22-22</u>	<u>1500</u>	<u>G</u>	<u>W</u>	<u>N</u>	<u>N</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>4</u>	<u>pH= 7.41</u>
<b>Possible Hazard Identification</b>			<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological			<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>			<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)			Special Instructions/QC Requirements:											
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:								
Relinquished by: <u>[Signature]</u>		Date/Time: <u>2/23/22 0959</u>		Company: <u>ACC</u>		Received by: <u>[Signature]</u>		Date/Time: <u>2/23/22 0959</u>		Company:				
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:				
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:				
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:										

<b>Client Information</b>			Sampler: <u>Hunter Auld</u>		Lab PM: Brown, Shali			Carrier Tracking No(s):			COC No:					
Client Contact: SCS Contacts			Phone: <u>77c-594-5998</u>		E-Mail: shali.brown@eurofinset.com						Page:					
Company: GA Power												Job #:				
Address: 241 Ralph McGill Blvd SE			Due Date Requested:									Preservation Codes:				
City: Atlanta			TAT Requested (days):									A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA				
State, Zip: GA, 30308												M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)				
Phone: 404-506-7116(Tel)			PO #:													
Email: SCS Contacts			WO #:													
Project Name: Plant McIntosh Ash Pond 1			Project #: 18019956													
Site: Georgia			SSOW#:													
												Other:  Special Instructions/Note: Full App III plus Detected App IV				
<b>Sample Identification</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type</b> (C=comp, G=grab)	<b>Matrix</b> (W=water, S=soil, O=waste/oil, BT=Tissue, A=Air)	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MS (Yes or No)</b>	<b>App. III Metals (B, Ca)</b>	<b>App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl)</b>	<b>Radium 226 &amp; 228 (SW-846 931619320)</b>	<b>Total Number of containers</b>					
						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		pH= 7.44				
MGWC-2						2-23-22	0950	G	W	N	N	✓	✓	✓	4	PH= 7.44
MGWC-7						2-23-22	1125	G	W	M	N	✓	✓	✓	6A	PH= 6.91 Extra Rad
FB-2						2-23-22	1455	G	W	M	N	✓	✓	✓		PH=
MGWC-8						2-23-22	1550	G	W	N	N	✓	✓	✓		PH= 6.22
															PH=	
															PH=	
															PH=	
															PH=	
															PH=	
															PH=	
															PH=	
															PH=	
															PH=	
															PH=	
															PH=	
												180-134315 Chain of Custody				
<b>Possible Hazard Identification</b>						<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>										
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months										
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:										
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:										
Relinquished by: <u>H. Auld</u>		Date/Time: 2/23/22 1320		Company: <u>ETM</u>		Received by: <u>E. J. ...</u>		Date/Time: 2/24/22		Company: <u>ETA</u>						
Relinquished by: <u>E. J. ...</u>		Date/Time: 2/24/22 16:00		Company: <u>ETA</u>		Received by: <u>M. ...</u>		Date/Time: 2-26-22		Company: <u>ETA/PH</u>						
Relinquished by: <u>[Signature]</u>		Date/Time: <u>10:00</u>		Company: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Date/Time: <u>10:00</u>		Company: <u>[Signature]</u>						
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:												
△ Yes △ No																

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

<b>Client Information</b>		Sampler: <i>S. Berisford</i>		Lab PM: Brown, Shali		Carrier Tracking No(s):		COC No:			
Client Contact:		Phone: <i>770-544-5498</i>		E-Mail: shali.brown@eurofinset.com				Page:			
SCS Contacts											
Company: GA Power		<b>Analysis Requested</b>						Job #:			
Address: 241 Ralph McGill Blvd SE								Due Date Requested:		Preservation Codes:	
City: Atlanta								TAT Requested (days):		A - HCL                    M - Hexane B - NaOH                 N - None C - Zn Acetate          O - AsNaO2 D - Nitric Acid          P - Na2O4S E - NaHSO4              Q - Na2SO3 F - MeOH                 R - Na2S2O3 G - Amchlor             S - H2SO4 H - Ascorbic Acid      T - TSP Dodecahydrate I - Ice                      U - Acetone J - DI Water              V - MCAA K - EDTA                 W - pH 4-5 L - EDA                    Z - other (specify)	
State, Zip: GA, 30308								PO #:		Other:	
Phone: 404-506-7116(Tel)		WO #:									
Email: SCS Contacts		Project #:		Project #:		Project #:					
Project Name: Plant McIntosh Ash Pond 1		SSOW#:		SSOW#:		SSOW#:					
Site: Georgia											
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	App. III Metals (B, Ca)	Cl, F, SO <sub>4</sub> , TDS (EPA 300.0 & SM 2540C)	App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl)	Radium 226 & 228 (SW-846 9315/9320)	Total Number of Containers	Special Instructions/Note: Full App III plus Detected App IV
<i>Dop-2</i>	<i>2-23-22</i>	<i>—</i>	<i>6</i>	<i>w</i>	<i>NN</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>4</i>	<i>pH= N/A</i>
<i>M6wC-3</i>	<i>2-23-22</i>	<i>1240</i>	<i>6</i>	<i>w</i>	<i>NN</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>4</i>	<i>pH= 6.98</i>
<i>EB-2</i>	<i>2-22-22</i>	<i>1440</i>	<i>6</i>	<i>w</i>	<i>NN</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>4</i>	<i>pH= N/A</i>
											<i>pH=</i>
											<i>pH=</i>
											<i>pH=</i>
											<i>pH=</i>
											<i>pH=</i>
											<i>pH=</i>
											<i>pH=</i>
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:						
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:					
Relinquished by: <i>[Signature]</i>		Date/Time: <i>2/24/22 13:20</i>		Company: <i>ETM</i>		Received by: <i>[Signature]</i>		Date/Time: <i>2/24/22 13:20</i>		Company: <i>ETM</i>	
Relinquished by: <i>[Signature]</i>		Date/Time: <i>2/24/22 16:00</i>		Company: <i>ETM</i>		Received by: <i>[Signature]</i>		Date/Time: <i>2-26-22</i>		Company: <i>TESTA P</i>	
Relinquished by: <i>[Signature]</i>		Date/Time: <i>2/24/22 16:00</i>		Company: <i>ETM</i>		Received by: <i>[Signature]</i>		Date/Time: <i>10:00</i>		Company: <i>[Signature]</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:							







urofins

Environment Testing  
TestAmerica

ID:SAVA (912) 354-7858  
NG  
INS TESTAMERICA SAV  
LAROUCHE AVE  
SAVANNAH, GA 31404  
D STATES US

SHIP  
ACTL  
CAD:



BILL 180-134223 Waybill

**SAMPLE CUSTODY**  
**ESTAMERICA LABORATORIES, INC.**  
01 ALPHA DRIVE  
RIDC PARK  
PITTSBURGH PA 15238

REF: DEPT:  
2) 983-7053  
Uncorrected temp  
Thermometer ID  
CF 0 Initials Mo  
PT-WI-SR-001 effective 11/8/18



THU - 24 FEB 10:30A  
PRIORITY OVERNIGHT

2 of 3  
MPS# 5146 3367 7256  
D263  
Mstr# 5146 3367 7245

**XN AGCA**

15238  
PIT

eurofins

Environment Test  
TestAmerica

ORIGIN ID:SAVA (912) 354-7858  
SHIPPING  
EUROFINS TESTAMERICA SAV  
5102 LAROUCHE AVE  
SAVANNAH, GA 31404  
UNITED STATES US

SHIP DATE: 23F  
ACTWGT: 45.00  
CAD: 0886563/D

BILL THIRD-PAR

TO **SAMPLE CUSTODY**  
**TESTAMERICA LABORATORIES, INC.**  
301 ALPHA DRIVE  
RIDC PARK  
PITTSBURGH PA 15238

REF: DEPT:  
(412) 983-7053  
Uncorrected temp  
Thermometer ID  
CF 0 Initials Mo  
PT-WI-SR-001 effective 11/8/18

3 of 3  
MPS# 5146 3367 7267  
D263  
Mstr# 5146 3367 7245

**KN AGCA**

THU - 24 FEB 10:30A  
PRIORITY OVERNIGHT

eurofins

Environment Test  
TestAmerica

ORIGIN ID:SAVA (912) 354-7858  
SHIPPING  
EUROFINS TESTAMERICA SAV  
5102 LAROUCHE AVE  
SAVANNAH, GA 31404  
UNITED STATES US

BILL THIRD-PAR

TO **SAMPLE CUSTODY**  
**TESTAMERICA LABORATORIES, INC.**  
301 ALPHA DRIVE  
RIDC PARK  
PITTSBURGH PA 15238

REF: DEPT:  
(412) 983-7053  
Uncorrected temp  
Thermometer ID  
CF 0 Initials Mo  
PT-WI-SR-001 effective 11/8/18

THU - 24 FEB 10:30A  
PRIORITY OVERNIGHT

3 of 3  
MPS# 5146 3367 7245  
D263  
Mstr# 5146 3367 7245

**XN AGCA**

15238  
PIT



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

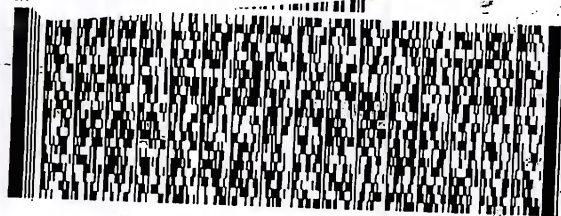
SHIP DATE: 24FEB22  
ACTWGT: 52.15 LB  
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO **SAMPLE RECIEVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
301 ALPHA DR.



180-134315 Waybill



FedEx  
Express



1 of 2  
TRK# 5220 7116 4770  
0201  
## MASTER ##

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

**NA AGCA**

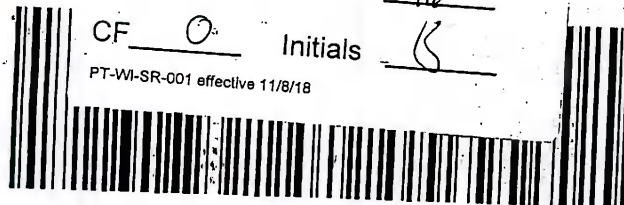
Uncorrected temp  
Thermometer ID

3.4 °C us

15238  
PIT

CF 0 Initials B

PT-WI-SR-001 effective 11/8/18



Part # 150469-4341MTM/EX/0922

570F2/027C/AF4B

J21102012110101

Environment Testing using this tag



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE: 24FEB22  
ACTWGT: 52.15 LB  
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO **SAMPLE RECIEVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238

(412) 863-7068  
INU:  
PO:

REF:

DEPT:



FedEx  
Express



2 of 2  
VPS# 5220 7116 4781  
263  
/str# 5220 7116 4770  
0201

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

**NA AGCA**

Uncorrected temp  
Thermometer ID

2.6 °C  
16

15238



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE:  
ACTWGT: 52  
CAD: 859116

BILL THIRD

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238

(412) 963-7068 REF: INU: PO: DEPT:



Pat # 159468-434 MTM Exp 09/22

134317 Waybill



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE: 24 FEB 22  
ACTWGT: 52.15 LB  
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238

(412) 963-7068 REF: INU: PO: DEPT:



FedEx  
Express



1 of 2  
TRK# 5220 7116 4770  
0201  
## MASTER ##

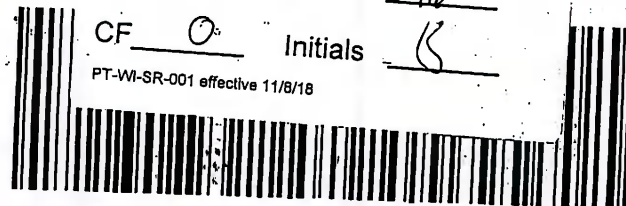
FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

NA AGCA

15238  
PIT

Uncorrected temp 3.4 °C US  
Thermometer ID 16

CF 0 Initials B  
PT-WI-SR-001 effective 11/8/18



FedEx  
Express



2 of 2  
NPS# 5220 7116 4781  
263  
Instr# 5220 7116 4770  
0201

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

NA AGCA

15238

Uncorrected temp 2.6 °C  
Thermometer ID 16

4/4 2022 PIT rev. 1)

# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-1

**Login Number: 134223**

**List Source: Eurofins Pittsburgh**

**List Number: 1**

**Creator: Abernathy, Eric L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-1

**Login Number: 134315**

**List Source: Eurofins Pittsburgh**

**List Number: 1**

**Creator: Abernathy, Eric L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-1

**Login Number: 134317**

**List Source: Eurofins Pittsburgh**

**List Number: 1**

**Creator: Abernathy, Eric L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Pittsburgh  
301 Alpha Drive  
RIDC Park  
Pittsburgh, PA 15238  
Tel: (412)963-7058

Laboratory Job ID: 180-134223-2

Client Project/Site: Plant McIntosh Ash Pond 1

For:

Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Attn: Kristen N Jurinko



Authorized for release by:  
3/31/2022 7:13:29 PM

Shali Brown, Project Manager II  
(615)301-5031  
[Shali.Brown@Eurofinset.com](mailto:Shali.Brown@Eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

PA Lab ID: 02-00416



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions/Glossary . . . . .	4
Certification Summary . . . . .	5
Sample Summary . . . . .	6
Method Summary . . . . .	7
Lab Chronicle . . . . .	8
Client Sample Results . . . . .	14
QC Sample Results . . . . .	31
QC Association Summary . . . . .	33
Chain of Custody . . . . .	34
Receipt Checklists . . . . .	46



# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Job ID: 180-134223-2

### Laboratory: Eurofins Pittsburgh

#### Narrative

#### Job Narrative 180-134223-2

#### Receipt

The samples were received on 2/24/2022 12:30 PM and 2/26/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.6°C, 3.4°C, 3.6°C and 4.0°C

#### Receipt Exceptions

The labels for both of the RAD containers for the following sample did not match the information listed on the Chain-of-Custody (COC): MGWA-6A (180-134223-6). The container labels both list a sample id of MGWA-6. One liter has a collection time of 13:32 and one has 11:05, while the COC lists MGWA-6A at 11:05. The id and time on the COC was used.

#### Gas Flow Proportional Counter

Method 9315\_Ra226: Radium-226 Prep Batch 160-552933The following samples were prepared at a reduced aliquot due to Matrix: DUP-1 (180-134223-1) and MGWC-7 (180-134315-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315\_Ra226: Radium 226 batch 552933Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-1 (180-134223-1), MGWA-10 (180-134223-2), MGWA-11 (180-134223-3), MGWC-1 (180-134223-4), FB-1 (180-134223-5), MGWA-6A (180-134223-6), MGWC-2 (180-134315-1), MGWC-7 (180-134315-2), FB-2 (180-134315-3), MGWC-8 (180-134315-4), DUP-2 (180-134317-1), MGWC-3 (180-134317-2) and EB-2 (180-134317-3)

Method 9315\_Ra226: Radium 226 batch 552933Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MGWA-6 (180-134223-7), MGWA-5 (180-134223-8), EB-1 (180-134223-9) and MGWC-12 (180-134223-10)

Method 9320\_Ra228: Radium-228 Prep Batch 160-552935The following samples were prepared at a reduced aliquot due to Matrix: DUP-1 (180-134223-1) and MGWC-7 (180-134315-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320\_Ra228: Radium 228 batch 552935Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-1 (180-134223-1), MGWA-10 (180-134223-2), MGWA-11 (180-134223-3), MGWC-1 (180-134223-4), FB-1 (180-134223-5), MGWA-6A (180-134223-6), MGWA-6 (180-134223-7), MGWA-5 (180-134223-8), EB-1 (180-134223-9), MGWC-12 (180-134223-10), MGWC-2 (180-134315-1), MGWC-7 (180-134315-2), FB-2 (180-134315-3), MGWC-8 (180-134315-4), DUP-2 (180-134317-1), MGWC-3 (180-134317-2), EB-2 (180-134317-3), (LCS 160-552935/1-A), (LCSD 160-552935/2-A) and (MB 160-552935/22-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### Rad

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Definitions/Glossary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Qualifiers

### Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Accreditation/Certification Summary

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-07-23
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	07-01-22
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

# Sample Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-134223-1	DUP-1	Water	02/22/22 00:01	02/24/22 12:30
180-134223-2	MGWA-10	Water	02/22/22 10:31	02/24/22 12:30
180-134223-3	MGWA-11	Water	02/22/22 13:45	02/24/22 12:30
180-134223-4	MGWC-1	Water	02/22/22 16:05	02/24/22 12:30
180-134223-5	FB-1	Water	02/22/22 15:30	02/24/22 12:30
180-134223-6	MGWA-6A	Water	02/22/22 11:05	02/24/22 12:30
180-134223-7	MGWA-6	Water	02/22/22 12:15	02/24/22 12:30
180-134223-8	MGWA-5	Water	02/22/22 13:32	02/24/22 12:30
180-134223-9	EB-1	Water	02/22/22 13:40	02/24/22 12:30
180-134223-10	MGWC-12	Water	02/22/22 15:00	02/24/22 12:30
180-134315-1	MGWC-2	Water	02/23/22 09:50	02/26/22 10:00
180-134315-2	MGWC-7	Water	02/23/22 11:25	02/26/22 10:00
180-134315-3	FB-2	Water	02/23/22 14:55	02/26/22 10:00
180-134315-4	MGWC-8	Water	02/23/22 15:50	02/26/22 10:00
180-134317-1	DUP-2	Water	02/23/22 00:01	02/26/22 10:00
180-134317-2	MGWC-3	Water	02/23/22 12:40	02/26/22 10:00
180-134317-3	EB-2	Water	02/23/22 14:40	02/26/22 10:00



# Method Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

#### Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

#### Laboratory References:

TAL SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: DUP-1**  
 Date Collected: 02/22/22 00:01  
 Date Received: 02/24/22 12:30

**Lab Sample ID: 180-134223-1**  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			745.01 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557095	03/25/22 17:16	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			745.01 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:05	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

**Client Sample ID: MGWA-10**  
 Date Collected: 02/22/22 10:31  
 Date Received: 02/24/22 12:30

**Lab Sample ID: 180-134223-2**  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			996.59 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557095	03/25/22 17:16	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			996.59 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:05	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

**Client Sample ID: MGWA-11**  
 Date Collected: 02/22/22 13:45  
 Date Received: 02/24/22 12:30

**Lab Sample ID: 180-134223-3**  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			992.16 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557095	03/25/22 17:16	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			992.16 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:05	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-1**  
 Date Collected: 02/22/22 16:05  
 Date Received: 02/24/22 12:30

**Lab Sample ID: 180-134223-4**  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.95 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557095	03/25/22 17:17	FLC	TAL SL
Instrument ID: GFPCBLUE										

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Client Sample ID: MGWC-1

## Lab Sample ID: 180-134223-4

Date Collected: 02/22/22 16:05

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.95 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:05	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: FB-1

## Lab Sample ID: 180-134223-5

Date Collected: 02/22/22 15:30

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			992.83 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:28	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			992.83 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:05	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-6A

## Lab Sample ID: 180-134223-6

Date Collected: 02/22/22 11:05

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.43 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:28	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			999.43 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:06	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-6

## Lab Sample ID: 180-134223-7

Date Collected: 02/22/22 12:15

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			992.01 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:29	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			992.01 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:06	FLC	TAL SL
Instrument ID: GFPCBLUE										

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Client Sample ID: MGWA-6

## Lab Sample ID: 180-134223-7

Date Collected: 02/22/22 12:15

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL

## Client Sample ID: MGWA-5

## Lab Sample ID: 180-134223-8

Date Collected: 02/22/22 13:32

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.51 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:29	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			999.51 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:06	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: EB-1

## Lab Sample ID: 180-134223-9

Date Collected: 02/22/22 13:40

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			991.86 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:30	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			991.86 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:06	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-12

## Lab Sample ID: 180-134223-10

Date Collected: 02/22/22 15:00

Matrix: Water

Date Received: 02/24/22 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			997.75 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:30	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			997.75 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:06	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										



# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Client Sample ID: MGWC-2

Lab Sample ID: 180-134315-1

Date Collected: 02/23/22 09:50

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			995.21 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:31	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			995.21 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:06	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-7

Lab Sample ID: 180-134315-2

Date Collected: 02/23/22 11:25

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			755.30 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:31	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			755.30 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:06	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: FB-2

Lab Sample ID: 180-134315-3

Date Collected: 02/23/22 14:55

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.73 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557097	03/25/22 16:31	FLC	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			999.73 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:07	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-8

Lab Sample ID: 180-134315-4

Date Collected: 02/23/22 15:50

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			995.72 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	557097	03/25/22 16:31	FLC	TAL SL
Instrument ID: GFPCRED										

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Client Sample ID: MGWC-8

## Lab Sample ID: 180-134315-4

Date Collected: 02/23/22 15:50

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			995.72 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:07	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: DUP-2

## Lab Sample ID: 180-134317-1

Date Collected: 02/23/22 00:01

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.34 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557095	03/25/22 17:17	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			1000.34 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:07	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-3

## Lab Sample ID: 180-134317-2

Date Collected: 02/23/22 12:40

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			997.72 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1			557095	03/25/22 17:17	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			997.72 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557095	03/25/22 13:08	FLC	TAL SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL
Instrument ID: NOEQUIP										

## Client Sample ID: EB-2

## Lab Sample ID: 180-134317-3

Date Collected: 02/23/22 14:40

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.85 mL	1.0 g	552933	03/02/22 09:52	LPS	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	557108	03/25/22 17:20	FLC	TAL SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			999.85 mL	1.0 g	552935	03/02/22 10:22	LPS	TAL SL
Total/NA	Analysis	9320		1			557108	03/25/22 13:08	FLC	TAL SL
Instrument ID: GFPCPURPLE										

Eurofins Pittsburgh

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: EB-2**

**Lab Sample ID: 180-134317-3**

**Date Collected: 02/23/22 14:40**

**Matrix: Water**

**Date Received: 02/26/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			558094	03/31/22 15:23	EMH	TAL SL

**Laboratory References:**

TAL SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

**Analyst References:**

Lab: TAL SL

Batch Type: Prep

LPS = Lauren Szostak

Batch Type: Analysis

EMH = Elizabeth Hoerchler

FLC = Fernando Cruz



# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: DUP-1**  
 Date Collected: 02/22/22 00:01  
 Date Received: 02/24/22 12:30

**Lab Sample ID: 180-134223-1**  
 Matrix: Water

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0359	U	0.244	0.244	1.00	0.506	pCi/L	03/02/22 09:52	03/25/22 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					03/02/22 09:52	03/25/22 17:16	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.699</b>		0.362	0.367	1.00	0.536	pCi/L	03/02/22 10:22	03/25/22 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					03/02/22 10:22	03/25/22 13:05	1
Y Carrier	83.4		40 - 110					03/02/22 10:22	03/25/22 13:05	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>0.663</b>		0.437	0.441	5.00	0.536	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWA-10**

**Lab Sample ID: 180-134223-2**

Date Collected: 02/22/22 10:31

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.330	U	0.322	0.323	1.00	0.502	pCi/L	03/02/22 09:52	03/25/22 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	66.5		40 - 110					03/02/22 09:52	03/25/22 17:16	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.731		0.382	0.388	1.00	0.567	pCi/L	03/02/22 10:22	03/25/22 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	66.5		40 - 110					03/02/22 10:22	03/25/22 13:05	1
Y Carrier	84.5		40 - 110					03/02/22 10:22	03/25/22 13:05	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.06		0.500	0.505	5.00	0.567	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWA-11**

**Lab Sample ID: 180-134223-3**

Date Collected: 02/22/22 13:45

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.285	U	0.331	0.332	1.00	0.542	pCi/L	03/02/22 09:52	03/25/22 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.4		40 - 110					03/02/22 09:52	03/25/22 17:16	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.552		0.331	0.335	1.00	0.501	pCi/L	03/02/22 10:22	03/25/22 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.4		40 - 110					03/02/22 10:22	03/25/22 13:05	1
Y Carrier	82.2		40 - 110					03/02/22 10:22	03/25/22 13:05	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.837		0.468	0.472	5.00	0.542	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWC-1**

**Lab Sample ID: 180-134223-4**

Date Collected: 02/22/22 16:05

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.57		0.421	0.444	1.00	0.355	pCi/L	03/02/22 09:52	03/25/22 17:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		40 - 110					03/02/22 09:52	03/25/22 17:17	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.282	U	0.245	0.246	1.00	0.391	pCi/L	03/02/22 10:22	03/25/22 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		40 - 110					03/02/22 10:22	03/25/22 13:05	1
Y Carrier	86.0		40 - 110					03/02/22 10:22	03/25/22 13:05	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.85		0.487	0.508	5.00	0.391	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: FB-1**

**Lab Sample ID: 180-134223-5**

Date Collected: 02/22/22 15:30

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0232	U	0.250	0.250	1.00	0.500	pCi/L	03/02/22 09:52	03/25/22 16:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.3		40 - 110					03/02/22 09:52	03/25/22 16:28	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.434	U	0.396	0.398	1.00	0.637	pCi/L	03/02/22 10:22	03/25/22 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.3		40 - 110					03/02/22 10:22	03/25/22 13:05	1
Y Carrier	83.0		40 - 110					03/02/22 10:22	03/25/22 13:05	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.457	U	0.468	0.470	5.00	0.637	pCi/L		03/31/22 15:23	1



# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWA-6A**

**Lab Sample ID: 180-134223-6**

Date Collected: 02/22/22 11:05

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.638		0.340	0.345	1.00	0.438	pCi/L	03/02/22 09:52	03/25/22 16:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.4		40 - 110					03/02/22 09:52	03/25/22 16:28	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0890	U	0.264	0.264	1.00	0.460	pCi/L	03/02/22 10:22	03/25/22 13:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.4		40 - 110					03/02/22 10:22	03/25/22 13:06	1
Y Carrier	83.7		40 - 110					03/02/22 10:22	03/25/22 13:06	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.728		0.430	0.434	5.00	0.460	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWA-6**

**Lab Sample ID: 180-134223-7**

Date Collected: 02/22/22 12:15

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.506		0.278	0.282	1.00	0.352	pCi/L	03/02/22 09:52	03/25/22 16:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		40 - 110					03/02/22 09:52	03/25/22 16:29	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0875	U	0.212	0.212	1.00	0.367	pCi/L	03/02/22 10:22	03/25/22 13:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		40 - 110					03/02/22 10:22	03/25/22 13:06	1
Y Carrier	83.7		40 - 110					03/02/22 10:22	03/25/22 13:06	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.594		0.350	0.353	5.00	0.367	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWA-5**

**Lab Sample ID: 180-134223-8**

Date Collected: 02/22/22 13:32

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.233	U	0.216	0.217	1.00	0.331	pCi/L	03/02/22 09:52	03/25/22 16:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		40 - 110					03/02/22 09:52	03/25/22 16:29	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.219	0.221	1.00	0.344	pCi/L	03/02/22 10:22	03/25/22 13:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		40 - 110					03/02/22 10:22	03/25/22 13:06	1
Y Carrier	82.2		40 - 110					03/02/22 10:22	03/25/22 13:06	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>0.511</b>		0.308	0.310	5.00	0.344	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: EB-1**

**Lab Sample ID: 180-134223-9**

Date Collected: 02/22/22 13:40

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0289	U	0.175	0.175	1.00	0.381	pCi/L	03/02/22 09:52	03/25/22 16:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.3		40 - 110					03/02/22 09:52	03/25/22 16:30	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0507	U	0.257	0.257	1.00	0.472	pCi/L	03/02/22 10:22	03/25/22 13:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.3		40 - 110					03/02/22 10:22	03/25/22 13:06	1
Y Carrier	81.5		40 - 110					03/02/22 10:22	03/25/22 13:06	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0796	U	0.311	0.311	5.00	0.472	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWC-12**

**Lab Sample ID: 180-134223-10**

Date Collected: 02/22/22 15:00

Matrix: Water

Date Received: 02/24/22 12:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.555		0.280	0.284	1.00	0.341	pCi/L	03/02/22 09:52	03/25/22 16:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					03/02/22 09:52	03/25/22 16:30	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.333	U	0.266	0.268	1.00	0.421	pCi/L	03/02/22 10:22	03/25/22 13:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					03/02/22 10:22	03/25/22 13:06	1
Y Carrier	80.4		40 - 110					03/02/22 10:22	03/25/22 13:06	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.888		0.386	0.390	5.00	0.421	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWC-2**

**Lab Sample ID: 180-134315-1**

Date Collected: 02/23/22 09:50

Matrix: Water

Date Received: 02/26/22 10:00

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.198	U	0.203	0.204	1.00	0.318	pCi/L	03/02/22 09:52	03/25/22 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/02/22 09:52	03/25/22 16:31	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.400</b>		0.239	0.241	1.00	0.359	pCi/L	03/02/22 10:22	03/25/22 13:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/02/22 10:22	03/25/22 13:06	1
Y Carrier	86.7		40 - 110					03/02/22 10:22	03/25/22 13:06	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>0.598</b>		0.314	0.316	5.00	0.359	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWC-7**

**Lab Sample ID: 180-134315-2**

Date Collected: 02/23/22 11:25

Matrix: Water

Date Received: 02/26/22 10:00

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.12		0.506	0.516	1.00	0.559	pCi/L	03/02/22 09:52	03/25/22 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.3		40 - 110					03/02/22 09:52	03/25/22 16:31	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.299	U	0.463	0.464	1.00	0.780	pCi/L	03/02/22 10:22	03/25/22 13:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.3		40 - 110					03/02/22 10:22	03/25/22 13:06	1
Y Carrier	80.4		40 - 110					03/02/22 10:22	03/25/22 13:06	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.42		0.686	0.694	5.00	0.780	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: FB-2**

**Lab Sample ID: 180-134315-3**

Date Collected: 02/23/22 14:55

Matrix: Water

Date Received: 02/26/22 10:00

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.107	U	0.196	0.197	1.00	0.352	pCi/L	03/02/22 09:52	03/25/22 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.8		40 - 110					03/02/22 09:52	03/25/22 16:31	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.559</b>		0.316	0.321	1.00	0.477	pCi/L	03/02/22 10:22	03/25/22 13:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.8		40 - 110					03/02/22 10:22	03/25/22 13:07	1
Y Carrier	86.4		40 - 110					03/02/22 10:22	03/25/22 13:07	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>0.666</b>		0.372	0.377	5.00	0.477	pCi/L		03/31/22 15:23	1



# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWC-8**

**Lab Sample ID: 180-134315-4**

Date Collected: 02/23/22 15:50

Matrix: Water

Date Received: 02/26/22 10:00

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.21		0.382	0.397	1.00	0.320	pCi/L	03/02/22 09:52	03/25/22 16:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					03/02/22 09:52	03/25/22 16:31	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.41		0.352	0.375	1.00	0.424	pCi/L	03/02/22 10:22	03/25/22 13:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					03/02/22 10:22	03/25/22 13:07	1
Y Carrier	86.7		40 - 110					03/02/22 10:22	03/25/22 13:07	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.62		0.519	0.546	5.00	0.424	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: DUP-2**  
 Date Collected: 02/23/22 00:01  
 Date Received: 02/26/22 10:00

**Lab Sample ID: 180-134317-1**  
 Matrix: Water

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.795</b>		0.331	0.339	1.00	0.386	pCi/L	03/02/22 09:52	03/25/22 17:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.1		40 - 110					03/02/22 09:52	03/25/22 17:17	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.672</b>		0.258	0.266	1.00	0.349	pCi/L	03/02/22 10:22	03/25/22 13:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.1		40 - 110					03/02/22 10:22	03/25/22 13:07	1
Y Carrier	86.7		40 - 110					03/02/22 10:22	03/25/22 13:07	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>1.47</b>		0.420	0.431	5.00	0.386	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: MGWC-3**

**Lab Sample ID: 180-134317-2**

Date Collected: 02/23/22 12:40

Matrix: Water

Date Received: 02/26/22 10:00

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.29		0.432	0.447	1.00	0.474	pCi/L	03/02/22 09:52	03/25/22 17:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					03/02/22 09:52	03/25/22 17:17	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	20.7		1.01	2.15	1.00	0.385	pCi/L	03/02/22 10:22	03/25/22 13:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					03/02/22 10:22	03/25/22 13:08	1
Y Carrier	81.1		40 - 110					03/02/22 10:22	03/25/22 13:08	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	22.0		1.10	2.20	5.00	0.474	pCi/L		03/31/22 15:23	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

**Client Sample ID: EB-2**

**Lab Sample ID: 180-134317-3**

Date Collected: 02/23/22 14:40

Matrix: Water

Date Received: 02/26/22 10:00

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0552	U	0.144	0.144	1.00	0.338	pCi/L	03/02/22 09:52	03/25/22 17:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.7		40 - 110					03/02/22 09:52	03/25/22 17:20	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.280	U	0.274	0.275	1.00	0.444	pCi/L	03/02/22 10:22	03/25/22 13:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.7		40 - 110					03/02/22 10:22	03/25/22 13:08	1
Y Carrier	88.2		40 - 110					03/02/22 10:22	03/25/22 13:08	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.224	U	0.310	0.310	5.00	0.444	pCi/L		03/31/22 15:23	1

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-552933/22-A**  
**Matrix: Water**  
**Analysis Batch: 557108**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 552933**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.002167	U	0.157	0.157	1.00	0.325	pCi/L	03/02/22 09:52	03/25/22 17:20	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	94.6		40 - 110		03/02/22 09:52	03/25/22 17:20	1			

**Lab Sample ID: LCS 160-552933/1-A**  
**Matrix: Water**  
**Analysis Batch: 557095**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 552933**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.61		1.38	1.00	0.349	pCi/L	94	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.0		40 - 110						

**Lab Sample ID: LCSD 160-552933/2-A**  
**Matrix: Water**  
**Analysis Batch: 557095**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 552933**

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER
				Uncert. (2σ+/-)							Limit
Radium-226	11.3	8.814		1.20	1.00	0.326	pCi/L	78	75 - 125	0.70	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	94.1		40 - 110								

## Method: 9320 - Radium-228 (GFPC)

**Lab Sample ID: MB 160-552935/22-A**  
**Matrix: Water**  
**Analysis Batch: 557108**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 552935**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.3067	U	0.253	0.254	1.00	0.403	pCi/L	03/02/22 10:22	03/25/22 13:08	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	94.6		40 - 110		03/02/22 10:22	03/25/22 13:08	1			
Y Carrier	86.7		40 - 110		03/02/22 10:22	03/25/22 13:08	1			

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: LCS 160-552935/1-A**  
**Matrix: Water**  
**Analysis Batch: 557095**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 552935**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
									75	125
Radium-228	8.76	9.448		1.10	1.00	0.382	pCi/L	108	75	125
<b>LCS LCS</b>										
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>							
Ba Carrier	98.0		40 - 110							
Y Carrier	83.4		40 - 110							

**Lab Sample ID: LCSD 160-552935/2-A**  
**Matrix: Water**  
**Analysis Batch: 557095**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 552935**

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		RER	Limit
									75	125	0.03	1
Radium-228	8.76	9.377		1.11	1.00	0.415	pCi/L	107	75	125	0.03	1
<b>LCSD LCSD</b>												
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>									
Ba Carrier	94.1		40 - 110									
Y Carrier	80.4		40 - 110									

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-2

## Rad

### Prep Batch: 552933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total/NA	Water	PrecSep-21	
180-134223-2	MGWA-10	Total/NA	Water	PrecSep-21	
180-134223-3	MGWA-11	Total/NA	Water	PrecSep-21	
180-134223-4	MGWC-1	Total/NA	Water	PrecSep-21	
180-134223-5	FB-1	Total/NA	Water	PrecSep-21	
180-134223-6	MGWA-6A	Total/NA	Water	PrecSep-21	
180-134223-7	MGWA-6	Total/NA	Water	PrecSep-21	
180-134223-8	MGWA-5	Total/NA	Water	PrecSep-21	
180-134223-9	EB-1	Total/NA	Water	PrecSep-21	
180-134223-10	MGWC-12	Total/NA	Water	PrecSep-21	
180-134315-1	MGWC-2	Total/NA	Water	PrecSep-21	
180-134315-2	MGWC-7	Total/NA	Water	PrecSep-21	
180-134315-3	FB-2	Total/NA	Water	PrecSep-21	
180-134315-4	MGWC-8	Total/NA	Water	PrecSep-21	
180-134317-1	DUP-2	Total/NA	Water	PrecSep-21	
180-134317-2	MGWC-3	Total/NA	Water	PrecSep-21	
180-134317-3	EB-2	Total/NA	Water	PrecSep-21	
MB 160-552933/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-552933/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-552933/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

### Prep Batch: 552935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134223-1	DUP-1	Total/NA	Water	PrecSep_0	
180-134223-2	MGWA-10	Total/NA	Water	PrecSep_0	
180-134223-3	MGWA-11	Total/NA	Water	PrecSep_0	
180-134223-4	MGWC-1	Total/NA	Water	PrecSep_0	
180-134223-5	FB-1	Total/NA	Water	PrecSep_0	
180-134223-6	MGWA-6A	Total/NA	Water	PrecSep_0	
180-134223-7	MGWA-6	Total/NA	Water	PrecSep_0	
180-134223-8	MGWA-5	Total/NA	Water	PrecSep_0	
180-134223-9	EB-1	Total/NA	Water	PrecSep_0	
180-134223-10	MGWC-12	Total/NA	Water	PrecSep_0	
180-134315-1	MGWC-2	Total/NA	Water	PrecSep_0	
180-134315-2	MGWC-7	Total/NA	Water	PrecSep_0	
180-134315-3	FB-2	Total/NA	Water	PrecSep_0	
180-134315-4	MGWC-8	Total/NA	Water	PrecSep_0	
180-134317-1	DUP-2	Total/NA	Water	PrecSep_0	
180-134317-2	MGWC-3	Total/NA	Water	PrecSep_0	
180-134317-3	EB-2	Total/NA	Water	PrecSep_0	
MB 160-552935/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-552935/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-552935/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

**Chain of Custody Record**

<b>Client Information</b>		Sampler: <i>Z. Ber. 3.6.22</i>		Lab PM: Brown, Shali		Carrier Tracking No(s):		COC No:																	
Client Contact SCS Contacts		Phone: <i>770-599-5998</i>		E-Mail: shali.brown@eurofinset.com				Page: <i>1 of 2</i>																	
Company: GA Power		Address: 241 Ralph McGill Blvd SE		Due Date Requested:		<b>Analysis Requested</b>		Job #:																	
City: Atlanta		State, Zip: GA, 30308		TAT Requested (days): <i>standard</i>				Preservation Codes:																	
Phone: 404-506-7116(Tel)		Email: SCS Contacts		PO #:				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA																	
Project Name: Plant McIntosh Ash Pond 1		Site: Georgia		Project #: 18019956		SSOW#:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)																	
Other:																									
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/sol, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform SIMSD (Yes or No)		App. III Metals (B, Ca)		Cl, F, SO <sub>4</sub> , TDS (EPA 300.0 & SM 2540C)		App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti)		Radium 226 & 228 (SW-846 9316/9320)		Total Number of containers		<b>Special Instructions/Note:</b> Full App III plus Detected App IV	
Preservation Code:																									
<i>Dcp-1</i>		<i>2/22/22</i>		<i>---</i>		<i>6</i>		<i>w</i>		<i>NN</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>4</i>		<i>pH= N/A</i>			
<i>M6WA-10</i>		<i>2/22/22</i>		<i>1631</i>		<i>6</i>		<i>w</i>		<i>NN</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>4</i>		<i>pH= 5.38</i>			
<i>M6WA-11</i>		<i>2/22/22</i>		<i>1345</i>		<i>6</i>		<i>w</i>		<i>NN</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>4</i>		<i>pH= 7.60</i>			
<i>M6WC-1</i>		<i>2/22/22</i>		<i>1605</i>		<i>6</i>		<i>w</i>		<i>NN</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>4</i>		<i>pH= 7.32</i>			
<i>FB-1</i>		<i>2/22/22</i>		<i>1530</i>		<i>6</i>		<i>w</i>		<i>NN</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>✓</i>		<i>4</i>		<i>pH= N/A</i>			
																						pH=			
																						pH=			
																						pH=			
																						pH=			
																						pH=			
																						pH=			
																						pH=			
																						pH=			



180-134223 Chain of Custody

<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: <i>2/23/22 0959</i>		Company: <i>ACC</i>		Received by: <i>[Signature]</i>	
Date/Time:		Company:		Received by:		Date/Time: <i>2/23/22 0959</i>	
Relinquished by:		Date/Time:		Company:		Received by:	
Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:	
Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			





**Eurofins TestAmerica, Pittsburgh**

301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

**Client Information**

Client Contact: *Hunter Auld*  
SCS Contacts: *770-594-5998*  
Lab PM: *Brown, Shali*  
E-Mail: *shali.brown@eurofinset.com*  
Carrier Tracking No(s):  
COC No:  
Page: *2 of 2*

Company: **GA Power**  
Address: **241 Ralph McGill Blvd SE**  
City: **Atlanta**  
State, Zip: **GA, 30308**  
Phone: **404-506-7116(Tel)**  
Email: **SCS Contacts**  
Project Name: **Plant McIntosh Ash Pond 1**  
Site: **Georgia**

**Analysis Requested**

Due Date Requested:  
TAT Requested (days): *Standard*  
Preservation Codes:  
A - HCL                      M - Hexane  
B - NaOH                     N - None  
C - Zn Acetate              O - AsNaO2  
D - Nitric Acid              P - Na2O4S  
E - NaHSO4                 Q - Na2SO3  
F - MeOH                     R - Na2S2O3  
G - Amchlor                S - H2SO4  
H - Ascorbic Acid          T - TSP Dodecahydrate  
I - Ice                         U - Acetone  
J - DI Water                 V - MCAA  
K - EDTA                     W - pH 4-5  
L - EDA                        Z - other (specify)  
Other:  
Special Instructions/Note: **Full App III plus Detected App IV**

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSI (Yes or No)	App. III Metals (B, Ca)	CI, F, SO <sub>4</sub> , TDS (EPA 300.0 & SM 2540C)	App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti)	Radium 226 & 228 (SW-846 9316/9320)	Total Number of containers	
MGWA-6A	2-22-22	1105	G	W	N	N	✓	✓	✓	✓	4	pH= 7.20
MGWA-6	2-22-22	1215	G	W	N	N	✓	✓	✓	✓	4	pH= 7.14
MGWA-5	2-22-22	1332	G	W	N	N	✓	✓	✓	✓	4	pH= 7.57
EB-1	2-22-22	1340	G	W	N	N	✓	✓	✓	✓	4	pH= N/A ←
MGWC-12	2-22-22	1500	G	W	N	N	✓	✓	✓	✓	4	pH= 7.41
												pH=
												pH=
												pH=
												pH=
												pH=
												pH=
												pH=
												pH=

**Possible Hazard Identification**  
 Non-Hazard    Flammable    Skin Irritant    Poison B    Unknown    Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client    Disposal By Lab    Archive For \_\_\_\_\_ Months

Deliverable Requested: I, II, III, IV, Other (specify)  
Special Instructions/QC Requirements:

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Method of Shipment: \_\_\_\_\_

Relinquished by:	Date/Time: 2/23/22 0959	Company: ACC	Received by:	Date/Time: 2/23/22 0959	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No      Cooler Temperature(s) °C and Other Remarks:



**Eurofins TestAmerica, Pittsburgh**

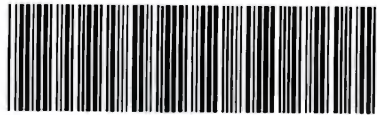
301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

**244- ATLANTA**



<b>Client Information</b>		Sampler: <u>Hunter Auld</u>		Lab PM: <u>Brown, Shali</u>		Carrier Tracking No(s):		COC No:					
Client Contact: SCS Contacts		Phone: <u>770-594-5998</u>		E-Mail: <u>shali.brown@eurofinset.com</u>				Page:					
Company: GA Power				<b>Analysis Requested</b>				Job #:					
Address: 241 Ralph McGill Blvd SE		Due Date Requested:						Preservation Codes:					
City: Atlanta		TAT Requested (days):						A - HCL                                    M - Hexane B - NaOH                                   N - None C - Zn Acetate                            O - AsNaO2 D - Nitric Acid                            P - Na2O4S E - NaHSO4                                 Q - Na2SO3 F - MeOH                                    R - Na2S2O3 G - Amchlor                                S - H2SO4 H - Ascorbic Acid                        T - TSP Dodecahydrate I - Ice                                        U - Acetone J - DI Water                                V - MCAA K - EDTA                                    W - pH 4-5 L - EDA                                      Z - other (specify)					
State, Zip: GA, 30308		PO #:						Other:					
Phone: 404-506-7116(Tel)		WO #:											
Email: SCS Contacts		Project #: 18019956											
Project Name: Plant McIntosh Ash Pond 1		SSOW#:											
Site: Georgia													
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MS (Yes or No)	App. III Metals (B, Ca)	Cl, F, SO <sub>4</sub> , TDS (EPA 300.0 & SM 2540C)	App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl)	Radium 226 & 228 (SW-846 931619320)	Total Number of containers	Special Instructions/Note: Full App III plus Detected App IV	
			Preservation Code:		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
MGWC-2	2-23-22	0950	G	W	N	N	✓	✓	✓	✓	4	pH= 7.44	
MGWC-7	2-23-22	1125	G	W	N	N	✓	✓	✓	✓	6	pH= 6.91 Extra Rad	
FB-2	2-23-22	1455	G	W	N	N	✓	✓	✓	✓		pH=	
MGWC-8	2-23-22	1550	G	W	N	N	✓	✓	✓	✓		pH= 6.22	
												pH=	
												pH=	
												pH=	
												pH=	
												pH=	
												pH=	
												pH=	
Possible Hazard Identification		Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:											
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:							
Relinquished by: <u>H. Auld</u>		Date/Time: <u>2/23/22 1320</u>		Company: <u>ETM</u>		Received by: <u>[Signature]</u>		Date/Time: <u>2/24/22</u>		Company: <u>ETA</u>			
Relinquished by: <u>[Signature]</u>		Date/Time: <u>2/24/22 1600</u>		Company: <u>ETM</u>		Received by: <u>[Signature]</u>		Date/Time: <u>2-26-22</u>		Company: <u>ETA</u>			
Relinquished by: <u>[Signature]</u>		Date/Time: <u>[Signature]</u>		Company: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Date/Time: <u>10:00</u>		Company: <u>[Signature]</u>			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:										Cooler Temperature(s) °C and Other Remarks:	



180-134315 Chain of Custody

**Eurofins TestAmerica, Pittsburgh**

301 Alpha Drive RIDC Park  
 Pittsburgh, PA 15238  
 Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

**244- ATLANTA**



<b>Client Information</b>		Sampler: <i>S. Berisho-d</i>		Lab PM: Brown, Shali		Carrier Tracking No(s):		COC No:																																																					
Client Contact: SCS Contacts		Phone: <i>770-544-5498</i>		E-Mail: shali.brown@eurofinset.com				Page:																																																					
Company: GA Power				<b>Analysis Requested</b>						Job #:																																																			
Address: 241 Ralph McGill Blvd SE		Due Date Requested:		<table border="1"> <thead> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Total Number of containers</th> </tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>						Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Total Number of containers																																									Preservation Codes:	
Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)							Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	Total Number of containers																																														
City: Atlanta		TAT Requested (days):								A - HCL                      M - Hexane B - NaOH                  N - None C - Zn Acetate            O - AsNaO2 D - Nitric Acid            P - Na2O4S E - NaHSO4                Q - Na2SO3 F - MeOH                    R - Na2S2O3 G - Amchlor                S - H2SO4 H - Ascorbic Acid        T - TSP Dodecahydrate I - Ice                         U - Acetone J - DI Water                V - MCAA K - EDTA                    W - pH 4-5 L - EDA                      Z - other (specify)																																																			
State, Zip: GA, 30308		PO #:								Other:																																																			
Phone: 404-506-7116(Tel)		WO #:																																																											
Email: SCS Contacts		Project #:																																																											
Project Name: Plant McIntosh Ash Pond 1		SSOW#:																																																											
Site: Georgia																																																													
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)</b>		<b>Preservation Code:</b>		<b>Special Instructions/Note: Full App III plus Detected App IV</b>																																																	
<i>Dop-2</i>		<i>2-23-22</i>		<i>---</i>		<i>G</i>		<i>W</i>		<i>NI</i>		<i>pH= N/A</i>																																																	
<i>M6WC-3</i>		<i>2-23-22</i>		<i>1240</i>		<i>G</i>		<i>W</i>		<i>NI</i>		<i>pH= 6.98</i>																																																	
<i>EB-2</i>		<i>2-22-22</i>		<i>1440</i>		<i>G</i>		<i>W</i>		<i>NI</i>		<i>pH= N/A</i>																																																	
												pH=																																																	
												pH=																																																	
												pH=																																																	
												pH=																																																	
												pH=																																																	
												pH=																																																	
												pH=																																																	
												pH=																																																	
												pH=																																																	



**Possible Hazard Identification**  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Deliverable Requested: I, II, III, IV, Other (specify) \_\_\_\_\_      Special Instructions/QC Requirements: \_\_\_\_\_

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: <i>2/24/22 13:20</i>	Company: <i>ETA</i>	Received by: <i>[Signature]</i>
Relinquished by: <i>[Signature]</i>	Date/Time: <i>2/24/22 16:00</i>	Company: <i>ETA</i>	Received by: <i>[Signature]</i>
Relinquished by: <i>[Signature]</i>	Date/Time: <i>2/24/22 10:00</i>	Company: <i>ETA</i>	Received by: <i>[Signature]</i>

Custody Seals Intact:  Yes  No      Custody Seal No.: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks: \_\_\_\_\_

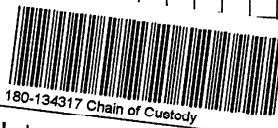
**Eurofins TestAmerica, Pittsburgh**  
 301 Alpha Drive RIDC Park  
 Pittsburgh, PA 15238  
 Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

**244- ATLANTA**

**eurofins** Environment Testing America

<b>Client Information</b>		Sampler: S. Perisic	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:					
Client Contact: SCS Contacts		Phone: 770-594-5498	E-Mail: shall.brown@eurofinset.com		Page:					
Company: GA Power		<b>Analysis Requested</b>			Job #:					
Address: 241 Ralph McGill Blvd SE		Due Date Requested:	Preservation Codes:							
City: Atlanta		TAT Requested (days):	A - HCL                  M - Hexane B - NaOH                N - None C - Zn Acetate        O - AsNaO2 D - Nitric Acid        P - Na2O4S E - NaHSO4            Q - Na2SO3 F - H2O2                R - Na2S2O3 G - Amchlor            S - H2SO4 H - Ascorbic Acid     T - TSP Dodecahydrate I - Ice                    U - Acetone J - DI Water            V - MCAA K - EDTA                W - pH 4-5 L - EDA                 Z - other (specify)							
State, Zip: GA, 30308		PO #:	Other:							
Phone: 404-508-7116(Tel)		WO #:	Special Instructions/Note: Full							
Email: SCS Contacts		Project #: 18019956	App III plus Detected App IV							
Project Name: Plant McIntosh Ash Pond 1		SSOW#:								
Site: Georgia										
<b>Sample Identification</b>	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soils, BT=BIOSUR, A=Air)	Field Filtered Sample (Yes or No)	App. III Metals (B, Ca)	App. III Metals (Pb, Cd, Cr, Co, Ni, Hg, Mn, Se, Ti)	Radium 226 & 228 (SM-546-5315/5320)	Total Number of Containers	Special Instructions/Note: Full
Dup-2	2-23-22		6	w	✓	✓	✓	✓	4	pH= N/A
M6WC-3	2-23-22	1240	6	w	✓	✓	✓	✓	4	pH= 6.98
EB-2	2-23-22	1440	6	w	✓	✓	✓	✓	4	pH= N/A
	2-23-22									pH=
										pH=
										pH=
										pH=
										pH=
										pH=
										pH=
										pH=
										pH=



urofins

Environment Testing  
TestAmerica

ORIGIN ID: SAVA (912) 354-7858  
SHIPPING ACT: CAD:  
EUROFINS TESTAMERICA SAV  
5102 LAROCHE AVE  
SAVANNAH, GA 31404  
UNITED STATES US

SHIP ACT: CAD:  
BILL 180-134223 Waybill



**SAMPLE CUSTODY**  
**TESTAMERICA LABORATORIES, INC.**  
301 ALPHA DRIVE  
RIDC PARK  
PITTSBURGH PA 15238

REF: DEPT:  
2) 983-7053  
Uncorrected temp  
Thermometer ID  
CF 0 Initials Mo  
PT-WI-SR-001 effective 11/8/18



THU - 24 FEB 10:30A  
PRIORITY OVERNIGHT

2 of 3  
MPS# 5146 3367 7256  
D263  
Mstr# 5146 3367 7245

**XN AGCA**

eurofins

Environment Test  
TestAmerica

ORIGIN ID: SAVA (912) 354-7858  
SHIPPING ACT: CAD:  
EUROFINS TESTAMERICA SAV  
5102 LAROCHE AVE  
SAVANNAH, GA 31404  
UNITED STATES US

SHIP DATE: 23F  
ACTWGT: 45.00  
CAD: 0886563/D

BILL THIRD-PAR

**SAMPLE CUSTODY**  
**TESTAMERICA LABORATORIES, INC.**  
301 ALPHA DRIVE  
RIDC PARK  
PITTSBURGH PA 15238

REF: DEPT:  
(412) 983-7053  
Uncorrected temp  
Thermometer ID  
CF 0 Initials Mo  
PT-WI-SR-001 effective 11/8/18

3 of 3  
MPS# 5146 3367 7267  
D263  
Mstr# 5146 3367 7245

**KN AGCA**

eurofins

Environment Test  
TestAmerica

ORIGIN ID: SAVA (912) 354-7858  
SHIPPING ACT: CAD:  
EUROFINS TESTAMERICA SAV  
5102 LAROCHE AVE  
SAVANNAH, GA 31404  
UNITED STATES US

BILL THIRD-PAR

**SAMPLE CUSTODY**  
**TESTAMERICA LABORATORIES, INC.**  
301 ALPHA DRIVE  
RIDC PARK  
PITTSBURGH PA 15238

REF: DEPT:  
(412) 983-7053  
Uncorrected temp  
Thermometer ID  
CF 0 Initials Mo  
PT-WI-SR-001 effective 11/8/18

3 of 3  
MPS# 5146 3367 7245  
D263  
Mstr# 5146 3367 7245

**XN AGCA**

THU - 24 FEB 10:30A  
PRIORITY OVERNIGHT

15238  
PA-US PIT



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

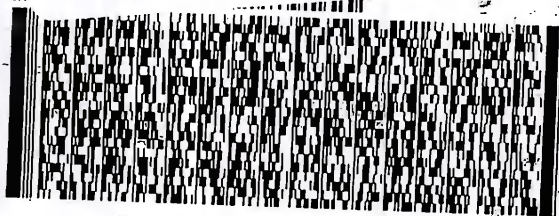
SHIP DATE: 24FEB22  
ACTWGT: 52.15 LB  
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO **SAMPLE RECIEVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
301 ALPHA DR.



180-134315 Waybill



1 of 2  
TRK# 5220 7116 4770  
0201  
## MASTER ##

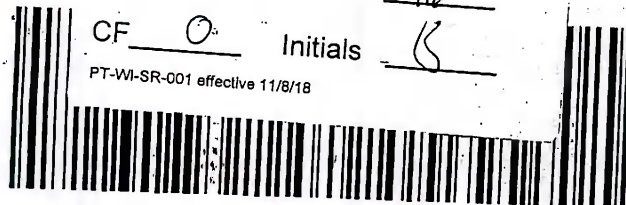
FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

**NA AGCA**  
Uncorrected temp  
Thermometer ID

15238  
PIT

CF 0 Initials B

PT-WI-SR-001 effective 11/8/18



Part # 150469-4341MTW/EX/0922

570F2/027C/AF4B

J21102012110101



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE: 24FEB22  
ACTWGT: 52.15 LB  
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO **SAMPLE RECIEVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238

(412) 863-7068

REF:

DEPT:



2 of 2  
NPS# 5220 7116 4781  
263  
/str# 5220 7116 4770  
0201

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

**NA AGCA**  
Uncorrected temp  
Thermometer ID

15238

2.6 °C  
16

-us 3PIT 2022

12

13



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE:  
ACTWGT: 52  
CAD: 859116

BILL THIRD



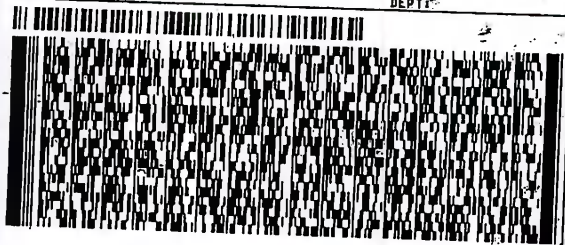
Pat # 159465-434 M/TM Exp 09/22

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238

(412) 963-7068  
INU:  
PO:

REF:

DEPT:



1 of 2

TRK# 5220 7116 4770  
0201

## MASTER ##

NA AGCA

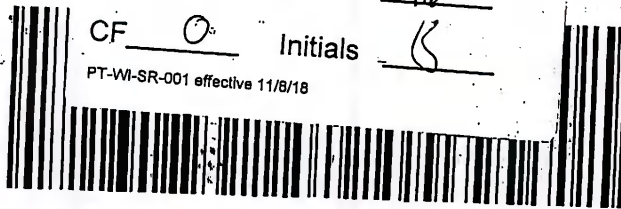
Uncorrected temp  
Thermometer ID

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

15238  
PIT

CF Initials

PT-WI-SR-001 effective 11/8/18



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE: 24 FEB 22  
ACTWGT: 52.15 LB  
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238

(412) 963-7068  
INU:  
PO:

REF:

DEPT:



2 of 2

IPS# 5220 7116 4781  
263  
Instr# 5220 7116 4770  
0201

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

NA AGCA

Uncorrected temp  
Thermometer ID

15238

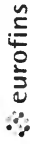
2.6 °C  
16

-US 3/17/2022

**Eurofins Pittsburgh**

301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
Phone: 412-963-7058 Fax: 412-963-2468

**Chain of Custody Record**



Environment Testing  
America



Client Information (Sub Contract Lab)		Lab PM:	Carrier Tracking Not(s):	COC No:
Client Contact: Shipping/Receiving		Brown, Shali		180-455792.1
Company: TestAmerica Laboratories, Inc.		E-Mail: Shali.Brown@Eurofins.com	State of Origin: Georgia	Page: Page 1 of 2
Address: 13715 Rider Trail North,		Accreditations Required (See note): 180-134223-2		
City: Earth City	Due Date Requested: 3/30/2022	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		
State, Zip: MO, 63045	TAT Requested (days):	M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (Specify)		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:	Analysis Requested		
Email:	WO #:	Total Number of Containers		
Project Name: Plant McIntosh Ash Pond 1	Project #: 18019956	Perform MS/MSD (Yes or No)		
Site: Southern McIntosh Ash Pond 1	SSOW#:	Field Filtered Sample (Yes or No)		
Sample Identification - Client ID (Lab ID)		9315_Ra228/PreSep_21 Radium-226		
DUP-1 (180-134223-1)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Solid, O=Wastewater, BT=Tissue, A=Air)
MGWA-10 (180-134223-2)	2/22/22	00:01 Eastern	Water	Water
MGWA-11 (180-134223-3)	2/22/22	10:31 Eastern	Water	Water
MGWC-1 (180-134223-4)	2/22/22	13:45 Eastern	Water	Water
FB-1 (180-134223-5)	2/22/22	16:05 Eastern	Water	Water
MGWA-6A (180-134223-6)	2/22/22	15:30 Eastern	Water	Water
MGWA-6 (180-134223-7)	2/22/22	11:05 Eastern	Water	Water
MGWA-5 (180-134223-8)	2/22/22	12:15 Eastern	Water	Water
EB-1 (180-134223-9)	2/22/22	13:32 Eastern	Water	Water
	2/22/22	13:40 Eastern	Water	Water

Special Instructions/Note:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 Special Instructions/QC Requirements:

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Custody Seals Intact: \_\_\_\_\_  
 Δ Yes Δ No

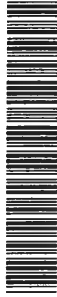
Received by: **FEDEX** Date/Time: **FEB 26 2022 0840**  
 Received by: *Sara Weddington* Date/Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Cooler Temperature(s) °C and Other Remarks:







# Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>		Lab PM: Brown, Shali	Carrier Tracking No(s): 180-455925.1
Client Contact: TestAmerica Laboratories, Inc.		E-Mail: Shali.Brown@Eurofins.com	State of Origin: Georgia
Address: 13715 Rider Trail North, Earth City, MO, 63045		Phone: 314-298-8566(Tel) 314-298-8757(Fax)	Page: 1 of 1
City: Earth City		Project #: 18019956	Job #: 180-134315-2
State, Zip: MO, 63045		SSOW#:	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)
Due Date Requested: 4/3/2022		Total Number of Containers: 2	
TAT Requested (days):		Special Instructions/Note:	
PO #:		920_Ra228/PreSep_0 Standard Target List	
WO #:		935_Ra226/PreSep_21 Radium-226	
Project Name: Plant McIntosh Ash Pond 1		R226Ra228_GFPc	
Site: Southern McIntosh Ash Pond 1		Perform MS/MSD (Yes or No)	
		Field Filtered Sample (Yes or No)	
		Preservation Code:	
		Matrix (W=water, S=solid, O=water, A=air)	
		Sample Type (C=comp, G=grab)	
		Sample Time	
		Sample Date	
Sample Identification - Client ID (Lab ID)			
MGWC-2 (180-134315-1)	2/23/22	09:50 Eastern	X
MGWC-7 (180-134315-2)	2/23/22	11:25 Eastern	X
FB-2 (180-134315-3)	2/23/22	14:55 Eastern	X
MGWC-8 (180-134315-4)	2/23/22	15:50 Eastern	X
<p>Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/testing/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.</p>			
<b>Possible Hazard Identification</b>			
Unconfirmed			
Deliverable Requested: I, II, III, IV, Other (specify)			
Primary Deliverable Rank: 2			
Empty Kit Relinquished by:			
Relinquished by: MO			
Date/Time: 2/28/22 17:00			
Relinquished by: FEDEX			
Date/Time: 2/28/22 17:00			
Relinquished by: FEDEX			
Date/Time: 2/28/22 17:00			
Relinquished by: Jena Worthington			
Date/Time: MAR 01 2022 09:00			
Relinquished by: Company			
Date/Time: Company			
Custody Seals Intact: Custody Seal No.:			
Δ Yes Δ No			
Cooler Temperature(s) °C and Other Remarks:			



# Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>		Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-455925.1
Client Contact: Shipping/Receiving		E-Mail: Shali.Brown@Eurofins.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): 180-134317-2		
Address: 13715 Rider Trail North,		Job #: 180-134317-2		
City: Earth City		<b>Preservation Codes:</b>		
State, Zip: MO, 63045		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		
Email:				
Project #: 18019956				
Site: Southern McIntosh Ash Pond 1				
Duo Date Requested: 4/3/2022				
TAT Requested (days):				
PO #:				
WO #:				
Sample Date		Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air)
2/23/22	00:01 Eastern	Water		
2/23/22	12:40 Eastern	Water		
2/22/22	14:40 Eastern	Water		
Sample ID (Lab ID)		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PreSep_21 Radium-226
DUP-2 (180-134317-1)		X	X	Ra226Ra228_GFPc
MGWC-3 (180-134317-2)		X	X	
EB-2 (180-134317-3)		X	X	
Special Instructions/Note:		Total Number of Containers		
		2		
		2		
		2		
<p>Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.</p>				
<b>Possible Hazard Identification</b>				
Unconfirmed				
Deliverable Requested: I, II, III, IV, Other (specify)				
Primary Deliverable Rank: 2				
Empty Kit Relinquished by:				
Relinquished by: <i>No</i>				
Relinquished by: <i>FEDEX</i>				
Relinquished by:				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Custody Seal No.:				
Cooler Temperature(s) °C and Other Remarks:				
Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month ) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months				
Special Instructions/QC Requirements:				
Method of Shipment:				
Received by: <i>FEDEX</i>				
Received by: <i>Sena Wodhington</i>				
Received by: <i>Company</i>				
Date/Time: <i>MAR 01 2022 09:00</i>				
Date/Time: <i>Company</i>				
Date/Time: <i>Company</i>				



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-2

**Login Number: 134223**

**List Source: Eurofins Pittsburgh**

**List Number: 1**

**Creator: Abernathy, Eric L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-2

**Login Number: 134223**

**List Number: 2**

**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**

**List Creation: 02/28/22 10:16 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-2

**Login Number: 134315**

**List Source: Eurofins Pittsburgh**

**List Number: 1**

**Creator: Abernathy, Eric L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-2

**Login Number: 134315**

**List Number: 2**

**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**

**List Creation: 03/01/22 09:39 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-2

**Login Number: 134317**

**List Source: Eurofins Pittsburgh**

**List Number: 1**

**Creator: Abernathy, Eric L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-2

**Login Number: 134317**

**List Source: Eurofins St. Louis**

**List Number: 2**

**List Creation: 03/01/22 09:39 AM**

**Creator: Worthington, Sierra M**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Pittsburgh  
301 Alpha Drive  
RIDC Park  
Pittsburgh, PA 15238  
Tel: (412)963-7058

Laboratory Job ID: 180-134223-3

Client Project/Site: Plant McIntosh Ash Pond 1

For:

Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Attn: Kristen N Jurinko



Authorized for release by:  
5/17/2022 5:35:33 PM

Shali Brown, Project Manager II  
(615)301-5031  
[Shali.Brown@et.eurofinsus.com](mailto:Shali.Brown@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions/Glossary . . . . .	4
Certification Summary . . . . .	5
Sample Summary . . . . .	6
Method Summary . . . . .	7
Lab Chronicle . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	11
QC Association Summary . . . . .	12
Chain of Custody . . . . .	13
Receipt Checklists . . . . .	17

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

---

**Job ID: 180-134223-3**

---

**Laboratory: Eurofins Pittsburgh**

---

**Narrative**

**Job Narrative  
180-134223-3**

**Receipt**

The samples were received on 2/26/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.6°C and 3.4°C

**Gas Flow Proportional Counter**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**Rad**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Definitions/Glossary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

## Qualifiers

### Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Accreditation/Certification Summary

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

## Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	07-01-22
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	05-10-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

# Sample Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-134317-1	DUP-2	Water	02/23/22 00:01	02/26/22 10:00
180-134317-2	MGWC-3	Water	02/23/22 12:40	02/26/22 10:00

1

2

3

4

5

6

7

8

9

10

11

12

13

# Method Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

#### Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

#### Laboratory References:

TAL SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

**Client Sample ID: DUP-2**  
**Date Collected: 02/23/22 00:01**  
**Date Received: 02/26/22 10:00**

**Lab Sample ID: 180-134317-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			741.55 mL	1.0 g	559311	04/08/22 12:44	HRT	TAL SL
Total/NA	Analysis	9315		1			563255	05/02/22 22:34	CLP	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			741.55 mL	1.0 g	559319	04/08/22 13:34	HRT	TAL SL
Total/NA	Analysis	9320		1			563255	05/02/22 14:56	CLP	TAL SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			563705	05/04/22 18:35	EMH	TAL SL
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-3**  
**Date Collected: 02/23/22 12:40**  
**Date Received: 02/26/22 10:00**

**Lab Sample ID: 180-134317-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			761.38 mL	1.0 g	559311	04/08/22 12:44	HRT	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	563255	05/02/22 22:34	CLP	TAL SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			761.38 mL	1.0 g	559319	04/08/22 13:34	HRT	TAL SL
Total/NA	Analysis	9320		1			563255	05/02/22 14:56	CLP	TAL SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			563705	05/04/22 18:35	EMH	TAL SL
Instrument ID: NOEQUIP										

**Laboratory References:**

TAL SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

**Analyst References:**

Lab: TAL SL

Batch Type: Prep

HRT = Hannah Tomasovic

Batch Type: Analysis

CLP = Cassandra Park

EMH = Elizabeth Hoerchler

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

**Client Sample ID: DUP-2**  
 Date Collected: 02/23/22 00:01  
 Date Received: 02/26/22 10:00

**Lab Sample ID: 180-134317-1**  
 Matrix: Water

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>1.38</b>		0.438	0.455	1.00	0.340	pCi/L	04/08/22 12:44	05/02/22 22:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					04/08/22 12:44	05/02/22 22:34	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>1.89</b>		0.428	0.462	1.00	0.476	pCi/L	04/08/22 13:34	05/02/22 14:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					04/08/22 13:34	05/02/22 14:56	1
Y Carrier	83.4		40 - 110					04/08/22 13:34	05/02/22 14:56	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>3.27</b>		0.612	0.648	5.00	0.476	pCi/L		05/04/22 18:35	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

**Client Sample ID: MGWC-3**

**Lab Sample ID: 180-134317-2**

Date Collected: 02/23/22 12:40

Matrix: Water

Date Received: 02/26/22 10:00

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.20		0.439	0.452	1.00	0.411	pCi/L	04/08/22 12:44	05/02/22 22:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					04/08/22 12:44	05/02/22 22:34	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.274	U	0.326	0.327	1.00	0.537	pCi/L	04/08/22 13:34	05/02/22 14:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					04/08/22 13:34	05/02/22 14:56	1
Y Carrier	84.5		40 - 110					04/08/22 13:34	05/02/22 14:56	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.47		0.547	0.558	5.00	0.537	pCi/L		05/04/22 18:35	1

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

## Method: 9320 - Radium-228 (GFPC)

**Lab Sample ID: MB 160-559319/20-A**  
**Matrix: Water**  
**Analysis Batch: 563272**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 559319**

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)							
Radium-228	0.7283		0.279	0.287	1.00	0.386	pCi/L	04/08/22 13:34	05/02/22 15:00	1	
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed		Dil Fac
Ba Carrier	95.0		40 - 110				04/08/22 13:34		05/02/22 15:00		1
Y Carrier	83.7		40 - 110				04/08/22 13:34		05/02/22 15:00		1

**Lab Sample ID: LCS 160-559319/1-A**  
**Matrix: Water**  
**Analysis Batch: 563255**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 559319**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.66	9.317		1.11	1.00	0.404	pCi/L	108	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	81.8		40 - 110						
Y Carrier	85.2		40 - 110						

**Lab Sample ID: LCSD 160-559319/2-A**  
**Matrix: Water**  
**Analysis Batch: 563255**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 559319**

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER
				Uncert. (2σ+/-)							Limit
Radium-228	8.66	8.857		1.04	1.00	0.349	pCi/L	102	75 - 125	0.21	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	92.8		40 - 110								
Y Carrier	84.1		40 - 110								

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1

Job ID: 180-134223-3

## Rad

### Prep Batch: 559311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134317-1	DUP-2	Total/NA	Water	PrecSep-21	
180-134317-2	MGWC-3	Total/NA	Water	PrecSep-21	

### Prep Batch: 559319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134317-1	DUP-2	Total/NA	Water	PrecSep_0	
180-134317-2	MGWC-3	Total/NA	Water	PrecSep_0	
MB 160-559319/20-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-559319/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-559319/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	



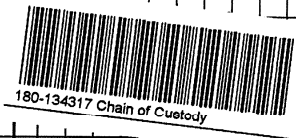
**Eurofins TestAmerica, Pittsburgh**  
 301 Alpha Drive RIDC Park  
 Pittsburgh, PA 15238  
 Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

244- ATLANTA

**eurofins** Environment Testing America

Client Information		Sampler: <i>J. Berisford</i>	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:						
SCS Contacts		Phone: 770-544-5448	E-Mail: shall.brown@eurofinset.com	Page:							
Company: GA Power		Analysis Requested			Job #:						
Address: 241 Ralph McGill Blvd SE		Due Date Requested:	Preservation Codes:								
City: Atlanta		TAT Requested (days):	A - HCL	M - Hexane							
State, Zip: GA, 30308		PO #:	B - NaOH	N - None							
Phone: 404-508-7116(Tel)		WO #:	C - Zn Acetate	O - AsNaO2							
Email: SCS Contacts		Project #:	D - Nitric Acid	P - Na2O4S							
Project Name: Plant McIntosh Ash Pond 1		SSOW#:	E - NaHSO4	Q - Na2SO3							
Site: Georgia			F - HNO3	R - Na2S2O3							
			G - Amchlor	S - H2SO4							
			H - Ascorbic Acid	T - TSP Dodecahydrate							
			I - Ice	U - Acetone							
			J - DI Water	V - MCAA							
			K - EDTA	W - pH 4-5							
			L - EDTA	Z - other (specify)							
				Other:							
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, BT=BISS, A=Air)	Field Filtered Sample (Yes or No)	App. III Metals (B, Ca)	App. IV Metals (Sb, As, Ba, Bi, Cd, Cr, Co, Pb, Li, Hg, Mn, Se, Tl)	Radium 226 & 228 (SW-846 531.619.320)	Total Number of containers	Special Instructions/Note: Full App III plus Detected App IV	
<i>Dup-2</i>	<i>2-23-22</i>		<i>6</i>	<i>W</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>4</i>	<i>pH= N/A</i>	
<i>M6WC-3</i>	<i>2-23-22</i>	<i>1240</i>	<i>6</i>	<i>W</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>4</i>	<i>pH= 6.98</i>	
<i>EB-2</i>	<i>2-23-22</i>	<i>1440</i>	<i>6</i>	<i>W</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>4</i>	<i>pH= N/A</i>	
										<i>pH=</i>	
										<i>pH=</i>	
										<i>pH=</i>	
										<i>pH=</i>	
										<i>pH=</i>	
										<i>pH=</i>	
										<i>pH=</i>	
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:						
<i>[Signature]</i>		<i>2/24/22 1320</i>	Company:		Relinquished by: <i>[Signature]</i>		<i>2/24/22 13:20</i>	Company: <i>ETC</i>			
<i>[Signature]</i>		<i>2/24/22 16:00</i>	Company: <i>ETC</i>		Received by: <i>[Signature]</i>		<i>2/26/22</i>	Company: <i>ETC</i>			
<i>[Signature]</i>		<i>2/24/22 16:00</i>	Company: <i>ETC</i>		Received by: <i>[Signature]</i>		<i>2/26/22 10:00</i>	Company: <i>ETC</i>			
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:							
<input type="checkbox"/> Yes <input type="checkbox"/> No											





Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE:  
ACTWGT: 52  
CAD: 859116

BILL THIRD



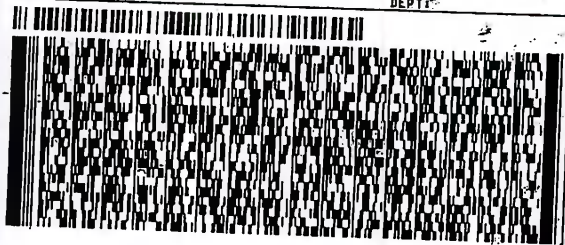
Pat # 159465-434 INTM Exp 09/22

TO **SAMPLE RECIEVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
**301 ALPHA DR.**  
**RIDC PARK**  
**PITTSBURGH PA 15238**

(412) 963-7068  
INU:  
PO:

REF:

DEPT:



1 of 2  
TRK# 5220 7116 4770  
0201  
## MASTER ##

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

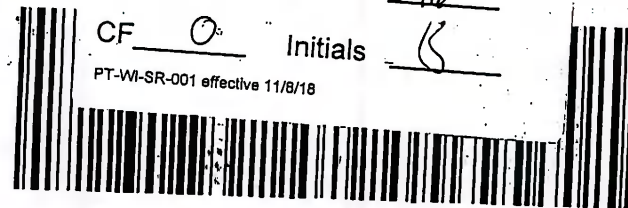
**NA AGCA**

15238

Uncorrected temp 3.4 °C - US  
Thermometer ID 16

CF Initials B

PT-WI-SR-001 effective 11/8/18



Environment Testing  
TestAmerica

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTING AMERICA ATL SC  
6215 REGENCY PARKWAY NW  
SUITE 900  
NORCROSS, GA 30071  
UNITED STATES US

SHIP DATE: 24 FEB 22  
ACTWGT: 52.15 LB  
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO **SAMPLE RECIEVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
**301 ALPHA DR.**  
**RIDC PARK**  
**PITTSBURGH PA 15238**

(412) 963-7068  
INU:  
PO:

REF:

DEPT:



2 of 2  
NPS# 5220 7116 4781  
263  
Instr# 5220 7116 4770  
0201

FRI - 25 FEB 10:30A  
PRIORITY OVERNIGHT

**NA AGCA**

15238

Uncorrected temp 2.6 °C - US  
Thermometer ID 16

5/PT/2022



## Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>	Sampler: Lab PM: Brown, Shali	Carrier Tracking No(s): 180-455925.1	COC No: 180-455925.1	Page: Page 1 of 1																																																																																																															
Client Contact: Shipping/Receiving	Phone: E-Mail: Shali.Brown@Eurofins.com	State of Origin: Georgia	Job #: 180-134317-2	Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 L - EDTA Z - other (specify) Other:																																																																																																															
Company: TestAmerica Laboratories, Inc.	Accreditations Required (See note):	Analysis Requested																																																																																																																	
Address: 13715 Rider Trail North,	Duo Date Requested: 4/3/2022	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>City: Earth City</td> <td>TAT Requested (days):</td> <td>9315_Ra226/Precep_21 Radium-226</td> <td>Ra226Ra228_GFPc</td> <td>9320_Ra226/Precep_0 Standard Target List</td> <td>Perform MS/MSD (Yes or No)</td> <td>Field Filtered Sample (Yes or No)</td> <td>9315_Ra226/Precep_21 Radium-226</td> <td>Ra226Ra228_GFPc</td> <td>9320_Ra226/Precep_0 Standard Target List</td> <td>Perform MS/MSD (Yes or No)</td> <td>Field Filtered Sample (Yes or No)</td> <td>9315_Ra226/Precep_21 Radium-226</td> <td>Ra226Ra228_GFPc</td> <td>9320_Ra226/Precep_0 Standard Target List</td> <td>Perform MS/MSD (Yes or No)</td> <td>Field Filtered Sample (Yes or No)</td> <td>9315_Ra226/Precep_21 Radium-226</td> <td>Ra226Ra228_GFPc</td> <td>9320_Ra226/Precep_0 Standard Target List</td> <td>Perform MS/MSD (Yes or No)</td> <td>Field Filtered Sample (Yes or No)</td> </tr> <tr> <td>State, Zip: MO, 63045</td> <td>PO #:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Phone: 314-298-8566(Tel) 314-298-8757(Fax)</td> <td>WO #:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Email:</td> <td>Project #:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																							City: Earth City	TAT Requested (days):	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	State, Zip: MO, 63045	PO #:																						Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:																						Email:	Project #:																					
City: Earth City	TAT Requested (days):				9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)																																																																																											
State, Zip: MO, 63045	PO #:																																																																																																																		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:																																																																																																																		
Email:	Project #:																																																																																																																		
Plant McIntosh Ash Pond 1	Project #: 18019956	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Preservation Code:	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/Precep_21 Radium-226	Ra226Ra228_GFPc	9320_Ra226/Precep_0 Standard Target List	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)																																																																																														
Site: Southern McIntosh Ash Pond 1	SOW#:	2/23/22	00:01 Eastern	Water	Water																																																																																																														
		2/23/22	12:40 Eastern	Water	Water																																																																																																														
		2/22/22	14:40 Eastern	Water	Water																																																																																																														
Special Instructions/Note:																																																																																																																			
<p>Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.</p>																																																																																																																			
Possible Hazard Identification																																																																																																																			
<p>Unconfirmed          Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2          Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____          Relinquished by: <i>No</i> Date: <i>2-22-22</i> Company: <i>CERT</i>          Relinquished by: _____ Date: _____ Company: _____          Relinquished by: _____ Date: _____ Company: _____</p>																																																																																																																			
<p>Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No          Cooler Temperature(s) °C and Other Remarks:</p>																																																																																																																			



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-3

**Login Number: 134317**

**List Source: Eurofins Pittsburgh**

**List Number: 1**

**Creator: Abernathy, Eric L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134223-3

**Login Number: 134317**

**List Number: 2**

**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**

**List Creation: 03/01/22 09:39 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**LEVEL 2A LABORATORY DATA VALIDATIONS**

**McIntosh Ash Pond 1**

**Semiannual Event**

**February 2022**

## **Georgia Power Company – McIntosh Ash Pond 1**

### **Quality Control Review of Analytical Data – February 2022**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins Environment Testing America, Pittsburgh and St. Louis for groundwater samples collected at McIntosh Ash Pond 1 between February 22, 2022 and February 23, 2022. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 180-134223-1 was revised to correct an errant boron detection in FB-2 (lab sample 180-134315-3) following reanalysis. SDG 180-134223-3 was provided following reanalysis of a sample and its field duplicate on SDG 180-134223-2 which yielded radium results that were inconsistent with historical data. The original radium-228 and combined radium results for MGWC-3 (lab sample 180-134317-2) analyzed on 3/25/2022 are considered outliers, and reanalysis data analyzed on 5/2/2022 are considered to be representative results based on comparisons with DUP-2 (lab sample 180-134317-1) from both the 3/25/2022 and 5/2/2022 analyses.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 Code of Federal Regulations (CFR), Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III, and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody were reviewed. Where there was a discrepancy between

the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

**Laboratory Precision:** Laboratory goals for precision were met.

**Field Precision:** Field goals for precision were met, except for radium-228 on MGWA-11 (180-134223-3) and cobalt, radium-226, and radium-228 on MGWC-3 (180-134317-2) as described in the qualifications section below.

**Accuracy:** Laboratory goals for accuracy were met.

**Detection Limits:** Project goals for detection limits were met.

**Completeness:** The analytical results for radium-228 and combined radium on MGWC-3 (180-134317-2) from the original analysis performed on 3/25/2022 and reported on SDG 180-134223-2 were rejected as outliers. The original radium-228 and combined radium results for DUP-2 (lab sample 180-134317-1) and the reanalysis data for both MGWC-3 and DUP-2 performed on 5/2/2022 and reported on SDG 180-134223-3 are considered to be representative results as they are consistent with each other and with historical data. Two data points were rejected during this event, resulting in a completion of 99.5%.

**Holding Times:** Holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

**J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

**ND:** The analyte was not detected above the method detection limit

**R:** The result was rejected

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Samples MGWA-11 (180-134223-3) and DUP-1 (180-134223-1) were qualified as estimated (J) for radium-228 as the relative percent difference (RPD) exceeded QC criteria (23.50% above the limit of 20).
- Samples MGWC-3 (180-134317-2) and DUP-2 (180-134317-1) were qualified as estimated (J) for cobalt as the RPD exceeded QC criteria (22.22% above the limit of 20).
- The original results for samples MGWC-3 (180-134317-2) and DUP-2 (180-134317-1) on SDG 180-134223-2 were qualified as estimated (J) for radium-226 and radium-228 as the RPDs exceeded QC criteria (47.48% and 187.42%, respectively, above the limit of 20). Reanalysis on SDG 180-134223-3 yielded passing RPDs.
- The original results for sample MGWC-3 (180-134317-2) on SDG 180-134223-2 were qualified as rejected (R) for radium-228 and combined radium as the reanalysis results on SDG 180-134223-3 were consistent with its duplicate sample analysis and historical data.
- Certain radium-228 results on SDGs 180-134223-2 and 180-134223-3 were qualified as non-detect (ND) due to the analyte(s) being detected at a similar concentration in an associated blank sample. As shown in Table 2, when the original sample result was below the reporting limit (RL), the minimum detectable concentration (MDC) was raised to the blank detection as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh Ash Pond 1 sampled between February 22, 2022 and February 23, 2022 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

**REFERENCES**

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0



Plant McIntosh Ash Pond 1  
2022 Annual Groundwater Monitoring and Corrective Action Report

TABLE 1

Georgia Power Company – McIntosh Ash Pond 1

Sample Summary Table – February 2022

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
134223-1	DUP-1	2/22/2022	180-134223-1	GW	FD (MGWA-11)	X	X	X	
134223-2	DUP-1	2/22/2022	180-134223-1	GW	FD (MGWA-11)				X
134223-1	MGWA-10	2/22/2022	180-134223-2	GW		X	X	X	
134223-2	MGWA-10	2/22/2022	180-134223-2	GW					X
134223-1	MGWA-11	2/22/2022	180-134223-3	GW		X	X	X	
134223-2	MGWA-11	2/22/2022	180-134223-3	GW					X
134223-1	MGWC-1	2/22/2022	180-134223-4	GW		X	X	X	
134223-2	MGWC-1	2/22/2022	180-134223-4	GW					X
134223-1	FB-1	2/22/2022	180-134223-5	WQ	FB	X	X	X	
134223-2	FB-1	2/22/2022	180-134223-5	WQ	FB				X
134223-1	MGWA-6A	2/22/2022	180-134223-6	GW		X	X	X	
134223-2	MGWA-6A	2/22/2022	180-134223-6	GW					X
134223-1	MGWA-6	2/22/2022	180-134223-7	GW		X	X	X	
134223-2	MGWA-6	2/22/2022	180-134223-7	GW					X
134223-1	MGWA-5	2/22/2022	180-134223-8	GW		X	X	X	
134223-2	MGWA-5	2/22/2022	180-134223-8	GW					X
134223-1	EB-1	2/22/2022	180-134223-9	WQ	EB	X	X	X	
134223-2	EB-1	2/22/2022	180-134223-9	WQ	EB				X
134223-1	MGWC-12	2/22/2022	180-134223-10	GW		X	X	X	
134223-2	MGWC-12	2/22/2022	180-134223-10	GW					X
134223-1	MGWC-2	2/23/2022	180-134315-1	GW		X	X	X	
134223-2	MGWC-2	2/23/2022	180-134315-1	GW					X
134223-1	MGWC-7	2/23/2022	180-134315-2	GW		X	X	X	
134223-2	MGWC-7	2/23/2022	180-134315-2	GW					X
134223-1	FB-2	2/23/2022	180-134315-3	WQ	FB	X	X	X	
134223-2	FB-2	2/23/2022	180-134315-3	WQ	FB				X

Abbreviations:  
 EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 GW – Groundwater  
 QC – Quality Control  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

Plant McIntosh Ash Pond 1  
 2022 Annual Groundwater Monitoring and Corrective Action Report

TABLE 1 (continued)  
 Georgia Power Company – McIntosh Ash Pond 1  
 Sample Summary Table – February 2022

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
134223-1	MGWC-8	2/23/2022	180-134315-4	GW		X	X	X	
134223-2	MGWC-8	2/23/2022	180-134315-4	GW					X
134223-1	DUP-2	2/23/2022	180-134317-1	GW	FD (MGWC-3)	X	X	X	
134223-2	DUP-2	2/23/2022	180-134317-1	GW	FD (MGWC-3)				X
134223-3	DUP-2	2/23/2022	180-134317-1	GW	FD (MGWC-3)				X
134223-1	MGWC-3	2/23/2022	180-134317-2	GW		X	X	X	
134223-2	MGWC-3	2/23/2022	180-134317-2	GW					X
134223-3	MGWC-3	2/23/2022	180-134317-2	GW					X
134223-1	EB-2	2/23/2022	180-134317-3	WQ	EB	X	X	X	
134223-2	EB-2	2/23/2022	180-134317-3	WQ	EB				X

Abbreviations:  
 EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 GW – Groundwater  
 QC – Quality Control  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

Plant McIntosh Ash Pond 1  
 2022 Annual Groundwater Monitoring and Corrective Action Report

TABLE 2  
 Georgia Power Company – McIntosh Ash Pond 1  
 Qualifier Summary Table – February 2022

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
134223-1	MGWC-3	Cobalt			J	RPD exceeds field goal
134223-1	DUP-2	Cobalt			J	RPD exceeds field goal
134223-2	MGWA-11	Radium-228			J	RPD exceeds field goal
134223-2	DUP-1	Radium-228			J	RPD exceeds field goal
134223-2	MGWC-3	Radium-226			J	RPD exceeds field goal
134223-2	DUP-2	Radium-226			J	RPD exceeds field goal
134223-2	MGWC-3	Radium-228			R	Replaced with reanalysis data
134223-2	DUP-2	Radium-228			J	RPD exceeds field goal
134223-2	MGWC-1	Radium-228		0.3067	ND	Blank detection
134223-2	MGWA-6A	Radium-228		0.3067	ND	Blank detection
134223-2	MGWA-6	Radium-228		0.3067	ND	Blank detection
134223-2	MGWA-5	Radium-228		0.3067	ND	Blank detection
134223-2	MGWC-7	Radium-228		0.3067	ND	Blank detection
134223-3	MGWC-3	Radium-228		0.7283	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids

Qualifiers:

J – Estimated Result  
 ND – Non-Detect Result  
 R – Rejected Data

## ANALYTICAL REPORT

Eurofins Pittsburgh  
301 Alpha Drive  
RIDC Park  
Pittsburgh, PA 15238  
Tel: (412)963-7058

Laboratory Job ID: 180-134316-1

Client Project/Site: Plant McIntosh Ash Pond 1 Supplemental

For:

Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Attn: Kristen N Jurinko



Authorized for release by:  
3/4/2022 6:43:16 PM

Shali Brown, Project Manager II  
(615)301-5031  
[Shali.Brown@Eurofinset.com](mailto:Shali.Brown@Eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

PA Lab ID: 02-00416



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions/Glossary . . . . .	4
Certification Summary . . . . .	5
Sample Summary . . . . .	6
Method Summary . . . . .	7
Lab Chronicle . . . . .	8
Client Sample Results . . . . .	9
QC Sample Results . . . . .	11
QC Association Summary . . . . .	12
Chain of Custody . . . . .	13
Receipt Checklists . . . . .	14

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

---

**Job ID: 180-134316-1**

---

**Laboratory: Eurofins Pittsburgh**

---

**Narrative**

**Job Narrative**  
**180-134316-1**

**Receipt**

The samples were received on 2/26/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.6°C and 3.4°C

**Metals**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Definitions/Glossary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Accreditation/Certification Summary

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

## Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	03-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-02-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22 *
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.





# Sample Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-134316-1	MGWC-20	Water	02/23/22 14:30	02/26/22 10:00
180-134316-2	MGWC-23	Water	02/23/22 14:47	02/26/22 10:00

1

2

3

4

5

6

7

8

9

10

11

12

13

# Method Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058



# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

**Client Sample ID: MGWC-20**

**Lab Sample ID: 180-134316-1**

Date Collected: 02/23/22 14:30

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	389899	03/01/22 09:53	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390199	03/02/22 11:55	RSK	TAL PIT

Instrument ID: DORY

**Client Sample ID: MGWC-23**

**Lab Sample ID: 180-134316-2**

Date Collected: 02/23/22 14:47

Matrix: Water

Date Received: 02/26/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	389899	03/01/22 09:53	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			390199	03/02/22 11:59	RSK	TAL PIT

Instrument ID: DORY

**Laboratory References:**

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

**Analyst References:**

Lab: TAL PIT

Batch Type: Prep

RGM = Rebecca Manns

Batch Type: Analysis

RSK = Robert Kurtz

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

**Client Sample ID: MGWC-20**

**Lab Sample ID: 180-134316-1**

Date Collected: 02/23/22 14:30

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00055	J	0.0025	0.00026	mg/L		03/01/22 09:53	03/02/22 11:55	1
Lithium	0.0066		0.0050	0.00083	mg/L		03/01/22 09:53	03/02/22 11:55	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

**Client Sample ID: MGWC-23**

**Lab Sample ID: 180-134316-2**

Date Collected: 02/23/22 14:47

Matrix: Water

Date Received: 02/26/22 10:00

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00026		0.0025	0.00026	mg/L		03/01/22 09:53	03/02/22 11:59	1
Lithium	0.0043	J	0.0050	0.00083	mg/L		03/01/22 09:53	03/02/22 11:59	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-389899/1-A**  
**Matrix: Water**  
**Analysis Batch: 390199**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389899**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cobalt	<0.00026		0.0025	0.00026	mg/L		03/01/22 09:53	03/02/22 11:34	1
Lithium	<0.00083		0.0050	0.00083	mg/L		03/01/22 09:53	03/02/22 11:34	1

**Lab Sample ID: LCS 180-389899/2-A**  
**Matrix: Water**  
**Analysis Batch: 390199**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 389899**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.474		mg/L		95	80 - 120

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh Ash Pond 1 Supplemental

Job ID: 180-134316-1

## Metals

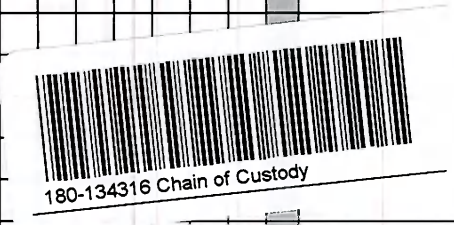
### Prep Batch: 389899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134316-1	MGWC-20	Total Recoverable	Water	3005A	
180-134316-2	MGWC-23	Total Recoverable	Water	3005A	
MB 180-389899/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-389899/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 390199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-134316-1	MGWC-20	Total Recoverable	Water	EPA 6020B	389899
180-134316-2	MGWC-23	Total Recoverable	Water	EPA 6020B	389899
MB 180-389899/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	389899
LCS 180-389899/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	389899

<b>Client Information</b> Client Contact: <u>[Signature]</u> SCS Contacts Company: GA Power Address: 241 Ralph McGill Blvd SE City: Atlanta State, Zip: GA, 30308 Phone: 404-506-7116(Tel) Email: SCS Contacts Project Name: Plant McIntosh Ash Pond 1 Supplemental Site: Georgia			Sampler: <u>[Signature]</u> Lab PM: Brown, Shali E-Mail: shali.brown@eurofinset.com Carrier Tracking No(s): COC No: Page:		<b>Analysis Requested</b>								Job #: <b>Preservation Codes:</b> A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:									
Due Date Requested: TAT Requested (days): PO #: WO #: Project #: 18019956 SSOV#:			Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		[Table with 8 columns for analysis parameters and 10 rows for sample data]								Total Number of Containers									
Sample Identification Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)			Preservation Code:										Special Instructions/Note: Full App III plus Detected App IV									
M6WC-20 2-23-22 1430 G W MN ✓			D										1 pH= 6.02									
M6WC-23 2-23-22 1447 G W MN ✓			D		1 pH= 7.48																	
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:					
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:															
Relinquished by: <u>[Signature]</u>			Date/Time: 2/24/22 1320		Company: EJA		Received by: <u>[Signature]</u>		Date/Time: 2/24/22 1320		Company: EJA											
Relinquished by: <u>[Signature]</u>			Date/Time: 2/24/22 16:00		Company: EJA		Received by: <u>[Signature]</u>		Date/Time: 2-26-22		Company: EJA											
Relinquished by: <u>[Signature]</u>			Date/Time:		Company:		Received by:		Date/Time: 10:00		Company:											
Custody Seals Intact: <input type="checkbox"/> Custody Seal No.:					Cooler Temperature(s) °C and Other Remarks:																	



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-134316-1

**Login Number: 134316**

**List Number: 1**

**Creator: Abernathy, Eric L**

**List Source: Eurofins Pittsburgh**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**LEVEL 2A LABORATORY DATA VALIDATIONS**

**McIntosh Ash Pond 1**

**Supplemental Event**

**February 2022**

# **Georgia Power Company – McIntosh Ash Pond 1**

## **Quality Control Review of Analytical Data – February 2022**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins Environment Testing America, Pittsburgh for groundwater samples collected at McIntosh AP1 February 23, 2022. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample location, analytical parameter, QC samples, sampling date, and laboratory sample delivery group (SDG) designation is summarized in Table 1 of this Appendix.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the supplemental samples were analyzed for select assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. The test method included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B).

Data were reviewed in accordance with the USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, accuracy (laboratory control samples), and blank contamination (laboratory blanks). Sample receipt conditions, holding times, and chains of custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

**Laboratory Precision:** Laboratory goals for precision were met.

**Field Precision:** Field goals for precision were met.

**Accuracy:** Laboratory goals for accuracy were met.

**Detection Limits:** Project goals for detection limits were met.

**Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** Holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the resample collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

**J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

**ND:** The analyte was not detected above the method detection limit

The data generated as part of this supplemental event met the QC criteria established in the analytical method and data validation guidelines. No sample qualifications were required.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh AP1 sampled February 23, 2022 in accordance with the analytical method, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## REFERENCES

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1

Georgia Power Company – McIntosh AP1

Sample Summary Table – February 2022

						Analyses
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (6020B)
134316	MGWC-20	2/23/2022	180-134316-1	GW		X
134316	MGMC-23	2/23/2022	180-134316-2	GW		X

Abbreviations:  
 GW – Groundwater  
 QC – Quality Control

# Low-Flow Test Report:

Test Date / Time: 2/22/2022 12:59:21 PM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWA-5</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 53.09 ft</b> <b>Total Depth: 63.09 ft</b> <b>Initial Depth to Water: 24.58 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 58.4 ft</b> <b>Estimated Total Volume Pumped: 6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 175 ml/min</b> <b>Final Draw Down: 8.6 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
---	---	--

## Test Notes:

Sampled on 2-22-22 at 1332. Sunny,70s. EB-1 here at 1340.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/22/2022 12:59 PM	00:00	7.67 pH	34.13 °C	0.00 µS/cm	7.03 mg/L	10.00 NTU	44.4 mV	24.58 ft	175.00 ml/min
2/22/2022 1:04 PM	05:00	7.68 pH	24.86 °C	227.51 µS/cm	2.13 mg/L	5.10 NTU	12.2 mV	24.90 ft	175.00 ml/min
2/22/2022 1:09 PM	10:00	7.64 pH	23.65 °C	230.36 µS/cm	1.40 mg/L	4.50 NTU	3.5 mV	25.00 ft	175.00 ml/min
2/22/2022 1:14 PM	15:00	7.62 pH	23.55 °C	230.71 µS/cm	1.26 mg/L	4.50 NTU	5.1 mV	25.10 ft	175.00 ml/min
2/22/2022 1:19 PM	20:00	7.60 pH	23.42 °C	229.82 µS/cm	0.90 mg/L	4.90 NTU	-8.0 mV	25.10 ft	175.00 ml/min
2/22/2022 1:24 PM	25:00	7.58 pH	23.28 °C	232.09 µS/cm	0.56 mg/L	5.30 NTU	-53.9 mV	25.20 ft	175.00 ml/min
2/22/2022 1:29 PM	30:00	7.57 pH	23.22 °C	235.32 µS/cm	0.32 mg/L	4.80 NTU	-83.0 mV	25.30 ft	175.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/22/2022 11:47:42 AM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWA-6</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 31.93 ft</b> <b>Total Depth: 41.93 ft</b> <b>Initial Depth to Water: 23.71 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 37.1 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 1.1 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
---	---	--

## Test Notes:

Sampled at 1215 on 2-22-22. Sunny, 70s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/22/2022 11:47 AM	00:00	7.33 pH	27.98 °C	474.51 µS/cm	5.47 mg/L	10.00 NTU	44.5 mV	23.71 ft	150.00 ml/min
2/22/2022 11:52 AM	05:00	7.17 pH	22.96 °C	501.07 µS/cm	0.43 mg/L	6.10 NTU	8.2 mV	23.80 ft	150.00 ml/min
2/22/2022 11:57 AM	10:00	7.15 pH	22.48 °C	502.00 µS/cm	0.32 mg/L	5.80 NTU	2.3 mV	23.80 ft	150.00 ml/min
2/22/2022 12:02 PM	15:00	7.15 pH	22.57 °C	503.54 µS/cm	0.23 mg/L	5.50 NTU	3.8 mV	23.80 ft	150.00 ml/min
2/22/2022 12:07 PM	20:00	7.14 pH	22.51 °C	502.98 µS/cm	0.20 mg/L	5.20 NTU	4.2 mV	23.80 ft	150.00 ml/min
2/22/2022 12:12 PM	25:00	7.14 pH	22.31 °C	502.91 µS/cm	0.22 mg/L	4.40 NTU	1.7 mV	23.80 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/22/2022 9:41:57 AM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWA-6A</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 29.67 ft</b> <b>Total Depth: 39.67 ft</b> <b>Initial Depth to Water: 22.36 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 37.5 ft</b> <b>Estimated Total Volume Pumped: 12.75 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 12.5 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
--	--	--

## Test Notes:

Sampled at 1105 on 2-2-22. Cloudy, 70s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/22/2022 9:41 AM	00:00	7.12 pH	22.60 °C	536.89 µS/cm	3.17 mg/L	16.60 NTU	-62.8 mV	22.36 ft	130.00 ml/min
2/22/2022 9:46 AM	05:00	7.16 pH	21.72 °C	483.52 µS/cm	0.51 mg/L	16.60 NTU	-95.8 mV	22.90 ft	130.00 ml/min
2/22/2022 9:51 AM	10:00	7.17 pH	21.59 °C	477.51 µS/cm	0.33 mg/L	17.70 NTU	-102.6 mV	23.00 ft	130.00 ml/min
2/22/2022 9:56 AM	15:00	7.17 pH	21.66 °C	471.92 µS/cm	0.27 mg/L	16.10 NTU	-105.5 mV	23.10 ft	130.00 ml/min
2/22/2022 10:01 AM	20:00	7.17 pH	21.91 °C	475.73 µS/cm	0.20 mg/L	15.80 NTU	-107.8 mV	23.20 ft	130.00 ml/min
2/22/2022 10:06 AM	25:00	7.18 pH	21.90 °C	472.54 µS/cm	0.18 mg/L	15.00 NTU	-115.0 mV	23.20 ft	130.00 ml/min
2/22/2022 10:11 AM	30:00	7.18 pH	21.74 °C	473.32 µS/cm	0.16 mg/L	13.40 NTU	-107.2 mV	23.30 ft	130.00 ml/min
2/22/2022 10:16 AM	35:00	7.18 pH	21.83 °C	473.34 µS/cm	0.15 mg/L	13.50 NTU	-106.1 mV	23.30 ft	150.00 ml/min
2/22/2022 10:21 AM	40:00	7.17 pH	22.04 °C	469.51 µS/cm	0.14 mg/L	17.00 NTU	-105.9 mV	23.30 ft	150.00 ml/min
2/22/2022 10:26 AM	45:00	7.16 pH	22.17 °C	470.98 µS/cm	0.13 mg/L	11.60 NTU	-105.4 mV	23.40 ft	150.00 ml/min
2/22/2022 10:31 AM	50:00	7.16 pH	22.58 °C	468.96 µS/cm	0.12 mg/L	10.00 NTU	-104.9 mV	23.40 ft	150.00 ml/min
2/22/2022 10:36 AM	55:00	7.16 pH	22.69 °C	469.92 µS/cm	0.13 mg/L	10.20 NTU	-104.9 mV	23.40 ft	150.00 ml/min
2/22/2022 10:41 AM	01:00:00	7.18 pH	22.79 °C	466.41 µS/cm	0.12 mg/L	8.90 NTU	-103.5 mV	23.40 ft	150.00 ml/min
2/22/2022 10:46 AM	01:05:00	7.18 pH	22.19 °C	466.87 µS/cm	0.12 mg/L	7.40 NTU	-102.3 mV	23.40 ft	150.00 ml/min
2/22/2022 10:51 AM	01:10:00	7.18 pH	22.18 °C	466.48 µS/cm	0.11 mg/L	6.20 NTU	-101.9 mV	23.40 ft	150.00 ml/min



2/22/2022 10:56 AM	01:15:00	7.18 pH	22.51 °C	467.74 µS/cm	0.11 mg/L	5.10 NTU	-102.4 mV	23.40 ft	150.00 ml/min
2/22/2022 11:01 AM	01:20:00	7.20 pH	22.81 °C	467.17 µS/cm	0.10 mg/L	4.80 NTU	-101.9 mV	23.40 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/22/2022 9:51:09 AM

Project: Plant McIntosh AP-1

Operator Name: J. Berisford

<b>Location Name: MGWA-10</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 43.09 ft</b> <b>Total Depth: 53.09 ft</b> <b>Initial Depth to Water: 18.6 ft</b>	<b>Pump Type: Peri. Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 48 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 28.8 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
---	--	--

## Test Notes:

Sunny, 60s, sample time- 1031

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
2/22/2022 9:51 AM	00:00	6.52 pH	28.73 °C	0.00 µS/cm	7.65 mg/L	2.77 NTU	130.5 mV	18.60 ft	100.00 ml/min
2/22/2022 9:56 AM	05:00	5.61 pH	23.23 °C	70.78 µS/cm	3.56 mg/L	2.64 NTU	142.2 mV	19.30 ft	100.00 ml/min
2/22/2022 10:01 AM	10:00	5.59 pH	22.92 °C	64.53 µS/cm	3.34 mg/L	3.29 NTU	176.3 mV	19.90 ft	100.00 ml/min
2/22/2022 10:06 AM	15:00	5.56 pH	23.28 °C	64.21 µS/cm	3.18 mg/L	2.16 NTU	170.6 mV	20.10 ft	100.00 ml/min
2/22/2022 10:11 AM	20:00	5.50 pH	23.25 °C	59.91 µS/cm	3.04 mg/L	1.78 NTU	171.3 mV	20.40 ft	100.00 ml/min
2/22/2022 10:16 AM	25:00	5.45 pH	23.37 °C	57.38 µS/cm	2.93 mg/L	1.71 NTU	171.3 mV	20.70 ft	100.00 ml/min
2/22/2022 10:21 AM	30:00	5.41 pH	23.50 °C	57.47 µS/cm	2.81 mg/L	1.66 NTU	170.6 mV	20.90 ft	100.00 ml/min
2/22/2022 10:26 AM	35:00	5.39 pH	23.63 °C	57.88 µS/cm	2.72 mg/L	1.62 NTU	170.3 mV	20.90 ft	100.00 ml/min
2/22/2022 10:31 AM	40:00	5.38 pH	23.78 °C	56.64 µS/cm	2.67 mg/L	1.28 NTU	118.7 mV	21.00 ft	100.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/22/2022 12:20:09 PM

Project: Plant McIntosh AP-1

Operator Name: J. Berisford

<b>Location Name: MGWA-11</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 45.81 ft</b> <b>Total Depth: 55.81 ft</b> <b>Initial Depth to Water: 22.28 ft</b>	<b>Pump Type: Peri. Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 51 ft</b> <b>Estimated Total Volume Pumped: 15.7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 185 ml/min Final Draw Down: 6 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
--	--	--

## Test Notes:

Sunny, 70s, sample time -1345, DUP-1 here

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
2/22/2022 12:20 PM	00:00	6.72 pH	35.97 °C	0.00 µS/cm	6.73 mg/L	1.11 NTU	-51.4 mV	22.28 ft	185.00 ml/min
2/22/2022 12:25 PM	05:00	7.65 pH	24.52 °C	266.66 µS/cm	2.02 mg/L	0.96 NTU	72.5 mV	22.60 ft	185.00 ml/min
2/22/2022 12:30 PM	10:00	7.65 pH	22.86 °C	270.48 µS/cm	2.79 mg/L	1.01 NTU	47.9 mV	22.70 ft	185.00 ml/min
2/22/2022 12:35 PM	15:00	7.64 pH	22.60 °C	271.60 µS/cm	2.13 mg/L	0.84 NTU	47.0 mV	22.70 ft	185.00 ml/min
2/22/2022 12:40 PM	20:00	7.65 pH	22.63 °C	261.92 µS/cm	1.54 mg/L	0.77 NTU	32.7 mV	22.70 ft	185.00 ml/min
2/22/2022 12:45 PM	25:00	7.65 pH	22.49 °C	264.47 µS/cm	1.61 mg/L	0.28 NTU	-10.6 mV	22.70 ft	185.00 ml/min
2/22/2022 12:50 PM	30:00	7.64 pH	22.58 °C	267.33 µS/cm	1.43 mg/L	0.27 NTU	-64.8 mV	22.70 ft	185.00 ml/min
2/22/2022 12:55 PM	35:00	7.61 pH	22.52 °C	272.42 µS/cm	1.82 mg/L	0.20 NTU	-89.9 mV	22.70 ft	185.00 ml/min
2/22/2022 1:00 PM	40:00	7.62 pH	22.56 °C	275.14 µS/cm	1.66 mg/L	0.33 NTU	-52.3 mV	22.70 ft	185.00 ml/min
2/22/2022 1:05 PM	45:00	7.61 pH	22.58 °C	273.64 µS/cm	1.48 mg/L	0.41 NTU	-52.8 mV	22.70 ft	185.00 ml/min
2/22/2022 1:10 PM	50:00	7.61 pH	22.58 °C	273.49 µS/cm	1.35 mg/L	0.33 NTU	-53.1 mV	22.70 ft	185.00 ml/min
2/22/2022 1:15 PM	55:00	7.60 pH	22.63 °C	269.17 µS/cm	1.22 mg/L	0.38 NTU	-53.2 mV	22.70 ft	185.00 ml/min
2/22/2022 1:20 PM	01:00:00	7.61 pH	22.65 °C	262.75 µS/cm	1.07 mg/L	0.27 NTU	-53.8 mV	22.70 ft	185.00 ml/min
2/22/2022 1:25 PM	01:05:00	7.60 pH	22.55 °C	270.32 µS/cm	0.93 mg/L	0.32 NTU	-100.8 mV	22.70 ft	185.00 ml/min
2/22/2022 1:30 PM	01:10:00	7.61 pH	22.54 °C	270.09 µS/cm	0.83 mg/L	0.37 NTU	-54.5 mV	22.70 ft	185.00 ml/min

2/22/2022 1:35 PM	01:15:00	7.61 pH	22.47 °C	271.71 µS/cm	0.62 mg/L	0.28 NTU	-55.2 mV	22.70 ft	185.00 ml/min
2/22/2022 1:40 PM	01:20:00	7.60 pH	22.60 °C	269.53 µS/cm	0.54 mg/L	0.51 NTU	-55.4 mV	22.70 ft	185.00 ml/min
2/22/2022 1:45 PM	01:25:00	7.60 pH	22.63 °C	267.84 µS/cm	0.45 mg/L	0.38 NTU	-55.1 mV	22.70 ft	185.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/22/2022 2:55:05 PM

Project: Plant McIntosh AP-1

Operator Name: J. Berisford

<b>Location Name: MGWC-1</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 46.08 ft</b> <b>Total Depth: 56.08 ft</b> <b>Initial Depth to Water: 39.24 ft</b>	<b>Pump Type: QED Bladder Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 51 ft</b> <b>Estimated Total Volume Pumped: 15.7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 225 ml/min</b> <b>Final Draw Down: 15.1 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
---	---	--

## Test Notes:

Sunny, 70s, sample time-1605, FB-1 here at 1530

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
2/22/2022 2:55 PM	00:00	6.16 pH	38.91 °C	0.00 µS/cm	6.50 mg/L	7.82 NTU	-63.3 mV	39.24 ft	225.00 ml/min
2/22/2022 3:00 PM	05:00	7.31 pH	24.52 °C	551.30 µS/cm	3.10 mg/L	6.18 NTU	41.6 mV	39.80 ft	225.00 ml/min
2/22/2022 3:05 PM	10:00	7.31 pH	23.08 °C	561.34 µS/cm	2.58 mg/L	8.43 NTU	36.6 mV	40.20 ft	225.00 ml/min
2/22/2022 3:10 PM	15:00	7.30 pH	23.00 °C	562.53 µS/cm	2.36 mg/L	8.11 NTU	43.3 mV	40.30 ft	225.00 ml/min
2/22/2022 3:15 PM	20:00	7.31 pH	22.74 °C	563.03 µS/cm	2.25 mg/L	7.89 NTU	42.6 mV	40.40 ft	225.00 ml/min
2/22/2022 3:20 PM	25:00	7.30 pH	22.49 °C	483.09 µS/cm	3.06 mg/L	36.00 NTU	39.7 mV	40.50 ft	225.00 ml/min
2/22/2022 3:25 PM	30:00	7.29 pH	22.80 °C	492.02 µS/cm	2.68 mg/L	29.00 NTU	38.4 mV	40.50 ft	225.00 ml/min
2/22/2022 3:30 PM	35:00	7.30 pH	22.32 °C	542.11 µS/cm	2.12 mg/L	19.00 NTU	43.3 mV	40.50 ft	225.00 ml/min
2/22/2022 3:35 PM	40:00	7.31 pH	22.18 °C	566.40 µS/cm	1.73 mg/L	7.99 NTU	32.4 mV	40.50 ft	225.00 ml/min
2/22/2022 3:40 PM	45:00	7.31 pH	22.20 °C	573.85 µS/cm	1.56 mg/L	5.61 NTU	11.3 mV	40.50 ft	225.00 ml/min
2/22/2022 3:45 PM	50:00	7.31 pH	22.21 °C	573.18 µS/cm	1.46 mg/L	4.08 NTU	-11.9 mV	40.50 ft	225.00 ml/min
2/22/2022 3:50 PM	55:00	7.31 pH	22.54 °C	574.83 µS/cm	1.32 mg/L	4.03 NTU	-16.2 mV	40.50 ft	225.00 ml/min
2/22/2022 3:55 PM	01:00:00	7.31 pH	22.53 °C	579.84 µS/cm	1.19 mg/L	3.57 NTU	-13.6 mV	40.50 ft	225.00 ml/min
2/22/2022 4:00 PM	01:05:00	7.32 pH	22.27 °C	583.21 µS/cm	1.09 mg/L	3.22 NTU	-8.8 mV	40.50 ft	225.00 ml/min
2/22/2022 4:05 PM	01:10:00	7.32 pH	22.36 °C	584.18 µS/cm	1.05 mg/L	2.58 NTU	-5.8 mV	40.50 ft	225.00 ml/min

**Samples**

Sample ID:	Description:
------------	--------------

Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 2/23/2022 9:23:47 AM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWC-2</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27.36 ft</b> <b>Total Depth: 37.36 ft</b> <b>Initial Depth to Water: 21.53 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 32.3 ft</b> <b>Estimated Total Volume Pumped: 5.6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 8 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
---	---	--

## Test Notes:

Sampled on 2-23-22 at 0950. Sunny, 70s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/23/2022 9:23 AM	00:00	7.99 pH	20.92 °C	4.30 µS/cm	8.90 mg/L	10.00 NTU	198.9 mV	21.53 ft	200.00 ml/min
2/23/2022 9:28 AM	05:00	7.44 pH	20.37 °C	715.67 µS/cm	0.52 mg/L	7.30 NTU	29.9 mV	22.00 ft	200.00 ml/min
2/23/2022 9:33 AM	10:00	7.45 pH	20.53 °C	709.90 µS/cm	0.30 mg/L	6.00 NTU	19.6 mV	22.10 ft	200.00 ml/min
2/23/2022 9:38 AM	15:00	7.45 pH	20.63 °C	707.13 µS/cm	0.25 mg/L	4.70 NTU	18.2 mV	22.20 ft	200.00 ml/min
2/23/2022 9:43 AM	20:00	7.44 pH	20.65 °C	709.48 µS/cm	0.22 mg/L	4.80 NTU	16.5 mV	22.20 ft	200.00 ml/min
2/23/2022 9:48 AM	25:00	7.44 pH	20.70 °C	704.45 µS/cm	0.20 mg/L	3.90 NTU	15.2 mV	22.20 ft	200.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/23/2022 12:10:06 PM

Project: Plant McIntosh AP-1

Operator Name: J. Berisford

<b>Location Name: MGWC-3</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28.74 ft</b> <b>Total Depth: 38.74 ft</b> <b>Initial Depth to Water: 20.45 ft</b>	<b>Pump Type: Peri. Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 34 ft</b> <b>Estimated Total Volume Pumped: 5.25 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 175 ml/min</b> <b>Final Draw Down: 5.4 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
---	--	--

## Test Notes:

Sunny, 70s, sample time-1240. DUP-2 here

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
2/23/2022 12:10 PM	00:00	6.03 pH	25.51 °C	0.00 µS/cm	8.36 mg/L	9.79 NTU	30.5 mV	20.45 ft	175.00 ml/min
2/23/2022 12:15 PM	05:00	6.94 pH	22.81 °C	597.21 µS/cm	1.20 mg/L	5.11 NTU	102.3 mV	20.70 ft	175.00 ml/min
2/23/2022 12:20 PM	10:00	6.96 pH	22.00 °C	600.82 µS/cm	0.53 mg/L	3.40 NTU	68.2 mV	20.90 ft	175.00 ml/min
2/23/2022 12:25 PM	15:00	6.97 pH	21.91 °C	593.46 µS/cm	0.39 mg/L	2.58 NTU	53.9 mV	20.90 ft	175.00 ml/min
2/23/2022 12:30 PM	20:00	6.97 pH	21.73 °C	589.72 µS/cm	0.33 mg/L	2.77 NTU	46.9 mV	20.90 ft	175.00 ml/min
2/23/2022 12:35 PM	25:00	6.94 pH	21.76 °C	589.40 µS/cm	0.33 mg/L	2.81 NTU	42.6 mV	20.90 ft	175.00 ml/min
2/23/2022 12:40 PM	30:00	6.98 pH	21.82 °C	589.90 µS/cm	0.37 mg/L	2.39 NTU	40.0 mV	20.90 ft	175.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------



# Low-Flow Test Report:

Test Date / Time: 2/23/2022 10:38:24 AM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWC-7</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 32.29 ft</b> <b>Total Depth: 42.29 ft</b> <b>Initial Depth to Water: 23.42 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 37.3 ft</b> <b>Estimated Total Volume Pumped: 5.6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 120 ml/min</b> <b>Final Draw Down: 5.8 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
---	---	--

## Test Notes:

Sampled on 2-23-33 at 1125. Sunny, 70s. Extra rad here.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/23/2022 10:38 AM	00:00	7.83 pH	26.74 °C	0.00 µS/cm	8.12 mg/L	10.00 NTU	33.5 mV	23.42 ft	120.00 ml/min
2/23/2022 10:43 AM	05:00	7.33 pH	24.88 °C	527.03 µS/cm	2.19 mg/L	18.60 NTU	-23.7 mV	23.70 ft	120.00 ml/min
2/23/2022 10:48 AM	10:00	7.21 pH	23.18 °C	547.14 µS/cm	0.45 mg/L	13.80 NTU	-36.1 mV	23.80 ft	120.00 ml/min
2/23/2022 10:53 AM	15:00	7.15 pH	23.12 °C	547.56 µS/cm	0.29 mg/L	13.40 NTU	-26.5 mV	23.80 ft	120.00 ml/min
2/23/2022 10:58 AM	20:00	7.05 pH	23.15 °C	545.96 µS/cm	0.23 mg/L	11.50 NTU	-26.2 mV	23.80 ft	120.00 ml/min
2/23/2022 11:03 AM	25:00	6.98 pH	23.32 °C	543.11 µS/cm	0.20 mg/L	9.20 NTU	-17.6 mV	23.80 ft	120.00 ml/min
2/23/2022 11:08 AM	30:00	6.95 pH	23.33 °C	541.48 µS/cm	0.17 mg/L	7.80 NTU	-15.7 mV	23.90 ft	120.00 ml/min
2/23/2022 11:13 AM	35:00	6.94 pH	23.42 °C	540.43 µS/cm	0.17 mg/L	6.40 NTU	-14.3 mV	23.90 ft	120.00 ml/min
2/23/2022 11:18 AM	40:00	6.92 pH	23.35 °C	539.23 µS/cm	0.15 mg/L	5.20 NTU	-15.0 mV	23.90 ft	120.00 ml/min
2/23/2022 11:23 AM	45:00	6.91 pH	23.16 °C	537.90 µS/cm	0.14 mg/L	4.80 NTU	-9.1 mV	23.90 ft	120.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/23/2022 3:18:20 PM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWC-8</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 42.56 ft</b> <b>Total Depth: 52.56 ft</b> <b>Initial Depth to Water: 33.42 ft</b>	<b>Pump Type: Bladder Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 47.8 ft</b> <b>Estimated Total Volume Pumped: 4.8 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 2.2 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
---	---	--

## Test Notes:

Sampled on 2-23-22 at 1550. Sunny, 70s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/23/2022 3:18 PM	00:00	7.57 pH	27.52 °C	0.20 µS/cm	8.06 mg/L	10.00 NTU	26.1 mV	33.42 ft	150.00 ml/min
2/23/2022 3:23 PM	05:00	5.61 pH	24.33 °C	484.27 µS/cm	0.66 mg/L	1.80 NTU	70.7 mV	33.50 ft	150.00 ml/min
2/23/2022 3:28 PM	10:00	5.46 pH	23.47 °C	577.33 µS/cm	0.36 mg/L	2.50 NTU	77.4 mV	33.50 ft	150.00 ml/min
2/23/2022 3:33 PM	15:00	6.09 pH	23.38 °C	739.00 µS/cm	0.28 mg/L	1.10 NTU	41.6 mV	33.50 ft	150.00 ml/min
2/23/2022 3:38 PM	20:00	6.13 pH	23.36 °C	775.64 µS/cm	0.21 mg/L	2.10 NTU	35.7 mV	33.50 ft	150.00 ml/min
2/23/2022 3:43 PM	25:00	6.20 pH	23.38 °C	793.67 µS/cm	0.19 mg/L	1.80 NTU	31.5 mV	33.60 ft	150.00 ml/min
2/23/2022 3:48 PM	30:00	6.22 pH	23.56 °C	800.75 µS/cm	0.16 mg/L	1.70 NTU	29.0 mV	33.60 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/22/2022 2:31:59 PM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWC-12</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 42.90 ft</b> <b>Total Depth: 52.90 ft</b> <b>Initial Depth to Water: 27.42 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 48.7 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 4.6 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
--	---	--

## Test Notes:

Sampled on 2-22-22 at 1500. Sunny, 70s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/22/2022 2:31 PM	00:00	7.56 pH	33.35 °C	0.00 µS/cm	7.06 mg/L	10.00 NTU	33.0 mV	27.42 ft	150.00 ml/min
2/22/2022 2:36 PM	05:00	7.46 pH	22.57 °C	301.11 µS/cm	0.71 mg/L	8.60 NTU	0.5 mV	27.70 ft	150.00 ml/min
2/22/2022 2:41 PM	10:00	7.43 pH	21.51 °C	306.31 µS/cm	0.39 mg/L	8.80 NTU	-8.0 mV	27.80 ft	150.00 ml/min
2/22/2022 2:46 PM	15:00	7.43 pH	21.18 °C	303.64 µS/cm	0.32 mg/L	6.50 NTU	-2.3 mV	27.80 ft	150.00 ml/min
2/22/2022 2:51 PM	20:00	7.42 pH	21.14 °C	304.20 µS/cm	0.26 mg/L	5.00 NTU	-6.9 mV	27.80 ft	150.00 ml/min
2/22/2022 2:56 PM	25:00	7.41 pH	21.05 °C	298.85 µS/cm	0.23 mg/L	4.70 NTU	-25.4 mV	27.80 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/23/2022 1:55:09 PM

Project: Plant McIntosh AP-1

Operator Name: J. Berisford

<b>Location Name: MGWC-20</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 44.77 ft</b> <b>Total Depth: 54.77 ft</b> <b>Initial Depth to Water: 23.77 ft</b>	<b>Pump Type: Peri Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 50 ft</b> <b>Estimated Total Volume Pumped: 5.25 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 17.2 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
--	--	--

## Test Notes:

Sunny, 70s, sample time -1430

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
2/23/2022 1:55 PM	00:00		39.87 °C	0.00 µS/cm	6.35 mg/L	3.45 NTU	-27.6 mV	23.77 ft	150.00 ml/min
2/23/2022 2:00 PM	05:00	6.20 pH	26.58 °C	383.91 µS/cm	1.20 mg/L	2.97 NTU	85.3 mV	24.20 ft	150.00 ml/min
2/23/2022 2:05 PM	10:00	6.18 pH	24.77 °C	389.43 µS/cm	0.95 mg/L	1.17 NTU	63.9 mV	24.70 ft	150.00 ml/min
2/23/2022 2:10 PM	15:00	6.15 pH	24.61 °C	383.04 µS/cm	0.89 mg/L	1.04 NTU	77.3 mV	25.00 ft	150.00 ml/min
2/23/2022 2:15 PM	20:00	6.09 pH	24.66 °C	383.34 µS/cm	0.69 mg/L	0.94 NTU	74.8 mV	25.10 ft	150.00 ml/min
2/23/2022 2:20 PM	25:00	6.04 pH	24.43 °C	387.71 µS/cm	0.61 mg/L	0.57 NTU	72.2 mV	25.20 ft	150.00 ml/min
2/23/2022 2:25 PM	30:00	6.01 pH	24.63 °C	384.19 µS/cm	0.60 mg/L	0.87 NTU	52.0 mV	25.20 ft	150.00 ml/min
2/23/2022 2:30 PM	35:00	6.02 pH	24.42 °C	384.15 µS/cm	0.59 mg/L	0.41 NTU	48.5 mV	25.20 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/23/2022 1:34:03 PM

Project: Plant McIntosh AP-1

Operator Name: Hunter Auld

<b>Location Name: MGWC-23</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 32.90 ft</b> <b>Total Depth: 42.90 ft</b> <b>Initial Depth to Water: 34.11 ft</b>	<b>Pump Type: Bladder Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 38.3 ft</b> <b>Estimated Total Volume Pumped: 18.3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 250 ml/min</b> <b>Final Draw Down: 4.7 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
--	--	--

## Test Notes:

Sampled on 2-23-22 at 1447. Sunny, 70s. FB-2 here at 1455.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/23/2022 1:34 PM	00:00	7.32 pH	25.22 °C	505.34 µS/cm	1.03 mg/L	10.00 NTU	-48.7 mV	34.11 ft	250.00 ml/min
2/23/2022 1:39 PM	05:00	7.57 pH	21.44 °C	541.14 µS/cm	0.40 mg/L	14.40 NTU	-56.7 mV	34.50 ft	250.00 ml/min
2/23/2022 1:44 PM	10:00	7.57 pH	20.90 °C	537.89 µS/cm	0.26 mg/L	10.70 NTU	-63.5 mV	34.50 ft	250.00 ml/min
2/23/2022 1:49 PM	15:00	7.51 pH	20.74 °C	531.34 µS/cm	0.27 mg/L	8.80 NTU	-47.7 mV	34.50 ft	250.00 ml/min
2/23/2022 1:54 PM	20:00	7.45 pH	20.73 °C	514.47 µS/cm	0.24 mg/L	8.70 NTU	-48.5 mV	34.50 ft	250.00 ml/min
2/23/2022 1:59 PM	25:00	7.45 pH	20.72 °C	501.31 µS/cm	0.21 mg/L	7.00 NTU	-35.5 mV	34.50 ft	250.00 ml/min
2/23/2022 2:04 PM	30:00	7.44 pH	20.63 °C	494.48 µS/cm	0.28 mg/L	6.90 NTU	-41.2 mV	34.50 ft	250.00 ml/min
2/23/2022 2:09 PM	35:00	7.48 pH	20.65 °C	490.03 µS/cm	0.22 mg/L	5.10 NTU	-31.2 mV	34.50 ft	250.00 ml/min
2/23/2022 2:14 PM	40:00	7.49 pH	20.56 °C	487.89 µS/cm	0.21 mg/L	5.50 NTU	-38.5 mV	34.50 ft	250.00 ml/min
2/23/2022 2:19 PM	45:00	7.47 pH	20.65 °C	484.95 µS/cm	0.20 mg/L	5.10 NTU	-27.0 mV	34.50 ft	250.00 ml/min
2/23/2022 2:24 PM	50:00	7.47 pH	20.61 °C	483.87 µS/cm	0.21 mg/L	5.10 NTU	-35.1 mV	34.50 ft	250.00 ml/min
2/23/2022 2:29 PM	55:00	7.46 pH	20.66 °C	480.75 µS/cm	0.25 mg/L	5.10 NTU	-26.2 mV	34.50 ft	250.00 ml/min
2/23/2022 2:34 PM	01:00:00	7.48 pH	20.60 °C	479.55 µS/cm	0.21 mg/L	4.90 NTU	-33.1 mV	34.50 ft	250.00 ml/min
2/23/2022 2:39 PM	01:05:00	7.47 pH	20.61 °C	478.23 µS/cm	0.19 mg/L	5.30 NTU	-24.7 mV	34.50 ft	250.00 ml/min
2/23/2022 2:44 PM	01:10:00	7.48 pH	20.55 °C	477.55 µS/cm	0.17 mg/L	4.90 NTU	-32.1 mV	34.50 ft	250.00 ml/min



# Daily Instrument Calibration Log

SITE: M. Parkshy App-1  
 TECHNICIAN: J. Berke  
 WATER LEVEL: Solent  
 WATER LEVEL S/N: 267309

INSTRUMENT S/N: 824189  
 INSTRUMENT TYPE: AquaTroll  
 CAL. SOLUTIONS:  
 ID: A.S. Cal LOT #: 21070193 EXP. DATE: 8/22  
 ID: pH 7 LOT #: 2100060 EXP. DATE: 8/22  
 ID: pH 10 LOT #: 21080189 EXP. DATE: 6/22  
 ID: ORP LOT #: 21140141 EXP. DATE: 8/22  
 ID: Cond LOT #: 1644948 EXP. DATE: 8/22

**Midday pH check**  
 Must be less than .10  
 (6.90-7.10 range)  
 Recalibrate if not within range

**Calibration Date:** 2/22/22  
 RDO: 100% sat. = 104% **Midday pH check**  
 PH: 4.00 = 4.21 7.00 = 6.98 10.00 = 10.07 7.0 = 6.96  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: 1413 = 1542  
 ORP (mV) 228 = 223.4

**Calibration Date:** 2/23/22  
 RDO: 100% sat. = 98.6% **Midday pH check**  
 PH: 4.00 = 4.13 7.00 = 7.02 10.00 = 9.81 7.0 = 7.03  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: 1413 = 1442  
 ORP (mV) 228 = 233.1

**Calibration Date:**  
 RDO: 100% sat. = **Midday pH check**  
 PH: 4.00 = 7.00 = 10.00 = 7.0 =  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: =  
 ORP (mV) =

**Calibration Date:**  
 RDO: 100% sat. = **Midday pH check**  
 PH: 4.00 = 7.00 = 10.00 = 7.0 =  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: =  
 ORP (mV) =

**Calibration Date:**  
 RDO: 100% sat. = **Midday pH check**  
 PH: 4.00 = 7.00 = 10.00 = 7.0 =  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: =  
 ORP (mV) =



## Daily Instrument Calibration Log

SITE: Plant McIntosh  
 TECHNICIAN: J. Benson

INSTRUMENT S/N: 150406040490  
 INSTRUMENT TYPE: Hach 2100Q  
 CAL. SOLUTION: 0 NTU - LOT # N/A — EXP. DATE: DI H<sub>2</sub>O  
10 NTU - LOT # A1013 EXP. DATE: 4/22  
20 NTU - LOT # A1013 EXP. DATE: 4/22

Calibration Date: 2/22/22

Calibration Solution	Instrument Reading	
0.0	0.54	NTU
10.0	9.78	NTU
20.0	26.2	NTU

Calibration Date: 2/23/22

Calibration Solution	Instrument Reading	
0.0	0.41	NTU
10.0	9.82	NTU
20.0	26.8	NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU



### Daily Instrument Calibration Log

SITE: Plant McIntosh  
 TECHNICIAN: H. Auld  
 WATER LEVEL: Solinst H  
 WATER LEVEL S/N: 48832

INSTRUMENT S/N: 728634  
 INSTRUMENT TYPE: AquaTroll  
 CAL. SOLUTIONS:

ID: <u>pH4</u>	LOT #: <u>1641124</u>	EXP. DATE: <u>08/23</u>
ID: <u>pH7</u>	LOT #: <u>21080188</u>	EXP. DATE: <u>6/22</u>
ID: <u>pH10</u>	LOT #: <u>21080189</u>	EXP. DATE: <u>6/22</u>
ID: <u>Cond.</u>	LOT #: <u>164998</u>	EXP. DATE: <u>8/22</u>
ID: <u>ORP</u>	LOT #: <u>2114014</u>	EXP. DATE: <u>8/22</u>
ID:	LOT #:	EXP. DATE:
ID:	LOT #:	EXP. DATE:

Midday pH check  
 Must be less than .10  
 (6.90-7.10 range)  
 Recalibrate if not within range

Calibration Date: 2/22/22  
 RDO: 100% sat. = 98.9  
 PH: 4.00 = 4.11      7.00 = 7.07      10.00 = 10.03      7.0 = 7.06  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 = post recal check  
 CONDUCTIVITY: 1413 = 1467  
 ORP (mV) 228 = 226

Midday pH check  
 7.0 = 7.06  
 7.0 = post recal check

Calibration Date: 2/23/22  
 RDO: 100% sat. = 102%  
 PH: 4.00 = 3.99      7.00 = 7.02      10.00 = 10.00      7.0 = 7.03  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 = post recal check  
 CONDUCTIVITY: 1413 = 1466  
 ORP (mV) 228 = 233

Midday pH check  
 7.0 = 7.03  
 7.0 = post recal check

Calibration Date:  
 RDO: 100% sat. =  
 PH: 4.00 =      7.00 =      10.00 =      7.0 =  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 = post recal check  
 CONDUCTIVITY: =  
 ORP (mV) =

Midday pH check  
 7.0 =  
 7.0 = post recal check

Calibration Date:  
 RDO: 100% sat. =  
 PH: 4.00 =      7.00 =      10.00 =      7.0 =  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 = post recal check  
 CONDUCTIVITY: =  
 ORP (mV) =

Midday pH check  
 7.0 =  
 7.0 = post recal check

Calibration Date:  
 RDO: 100% sat. =  
 PH: 4.00 =      7.00 =      10.00 =      7.0 =  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 = post recal check  
 CONDUCTIVITY: =  
 ORP (mV) =

Midday pH check  
 7.0 =  
 7.0 = post recal check





# Daily Instrument Calibration Log

SITE: \_\_\_\_\_ Plant McIntosh  
TECHNICIAN: H. Auld

INSTRUMENT S/N: 171200063767  
INSTRUMENT TYPE: Hach 2100Q  
CAL. SOLUTION: 0 NTU - LOT # NA EXP. DATE: \_\_\_\_\_  
10 NTU - LOT # A1201R EXP. DATE: Nov. 22  
20 NTU - LOT # A1207 EXP. DATE: Nov. 22

Calibration Date: 2-22-22

Calibration Solution	Instrument Reading	
0.0	0.3	NTU
10.0	10.7	NTU
20.0	20.7	NTU

Calibration Date: 2-23-22

Calibration Solution	Instrument Reading	
0.0	0.2	NTU
10.0	10.5	NTU
20.0	20.3	NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

1 - Location/Identification

		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Is the well visible and accessible?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well require protection from traffic?	Yes	No	No	No	No	No	No	No	No	No	No
d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

2 - Protective Outer Casing		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

3 - Surface Pad

		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

4 - Internal Well Casing

		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
f	Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	No	No	No	No	No	No	No	No	No	No	No

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

5 - Sampling (Groundwater Monitoring Wells Only):

		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Does the well recharge adequately when purged?	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes	N/A	Yes
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	No	No	No	N/A	No	No	No	No	No	N/A	No

Note: N/A - Not Applicable

6 - Based on your professional judgment, is the well construction / location appropriate to:

	MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:

Staff: J. Berisford  
Date: 2/21/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

**1 - Location/Identification**

		<b>MGWC-8</b>	<b>MGWC-12</b>	<b>MGWC-19</b>	<b>MGWC-20</b>	<b>MGWC-21</b>	<b>MGWC-22</b>	<b>MGWC-23</b>	<b>MGWC-24</b>	<b>PZ-13</b>	<b>PZ-14</b>	<b>PZ-15</b>
a	Is the well visible and accessible?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well require protection from traffic?	No	No	No	No	No	No	No	No	No	No	No
d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

2 - Protective Outer Casing		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".



**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

**3 - Surface Pad**

		<b>MGWC-8</b>	<b>MGWC-12</b>	<b>MGWC-19</b>	<b>MGWC-20</b>	<b>MGWC-21</b>	<b>MGWC-22</b>	<b>MGWC-23</b>	<b>MGWC-24</b>	<b>PZ-13</b>	<b>PZ-14</b>	<b>PZ-15</b>
a	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Does the well pad provide adequate surface seal and stability to the well?	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

4 - Internal Well Casing

		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
f	Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	No	No	No	No	No	No	No	No	No	No	No

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

5 - Sampling (Groundwater Monitoring Wells Only):

		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Does the well recharge adequately when purged?	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	No	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: N/A - Not Applicable

6 - Based on your professional judgment, is the well construction / location appropriate to:

		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
	1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:

MGWC-12 - Well pad is loose, not firm to the ground. Corrective action still needed.  
MGWC-22 - Redrilled weephole.

Staff: J. Berisford  
Date: 2/21/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

**1 - Location/Identification**

		<b>PZ-16</b>	<b>PZ-17</b>	<b>PZ-18</b>								
a	Is the well visible and accessible?	Yes	Yes	Yes								
b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes								
c	Does the well require protection from traffic?	No	No	No								
d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes								

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

2 - Protective Outer Casing		PZ-16	PZ-17	PZ-18								
a	Is the protective casing free from apparent damage?	Yes	Yes	Yes								
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes								
c	Does the casing have a functioning weep hole?	Yes	Yes	Yes								
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes								
e	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes								

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

**3 - Surface Pad**

		<b>PZ-16</b>	<b>PZ-17</b>	<b>PZ-18</b>								
a	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes								
b	Does the well pad provide adequate surface seal and stability to the well?	No	Yes	Yes								
c	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes								
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	No	Yes	Yes								
e	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes								

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

**4 - Internal Well Casing**

		<b>PZ-16</b>	<b>PZ-17</b>	<b>PZ-18</b>								
a	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes								
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes								
c	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes								
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes								
e	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes								
f	Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	No	No	No								

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2022 Well Inspection Form**



Permit No.: 051-011D

5 - Sampling (Groundwater Monitoring Wells Only):

		PZ-16	PZ-17	PZ-18								
a	Does the well recharge adequately when purged?	N/A	N/A	N/A								
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A								
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	N/A	N/A	N/A								

Note: N/A - Not Applicable

6 - Based on your professional judgment, is the well construction / location appropriate to:

	PZ-16	PZ-17	PZ-18									
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes									

7 - Corrective actions completed and Notes:

PZ-16 - Well pad is slightly loose, not firm to the ground. Corrective action still needed.  
PZ-17 - Well pad cleared of dirt/debris.

Staff: J. Berisford  
Date: 2/21/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".





**ATLANTIC COAST  
CONSULTING, INC.**

1150 Northmeadow Parkway  
Suite 100  
Roswell GA 30076  
(770) 594-5998  
[www.atlcc.net](http://www.atlcc.net)

**MEMORANDUM**

Date: July 14, 2022  
 To: Lauren Hartley (Southern Company)  
 CC: Kristen Jurinko (Southern Company), Ben Hodges (Southern Company)  
 From: Atlantic Coast Consulting, Inc.  
 Subject: Plant McIntosh Ash Pond 1- Well Maintenance and Repair Documentation  
 Georgia Power Company

---

Atlantic Coast Consulting, Inc. (ACC) has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant McIntosh during the 2022 Semiannual Groundwater Monitoring reporting period. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GAEPD) guidance on routine visual inspections of groundwater monitoring wells.

<b>Georgia Power Site/Unit</b>	<b>Date Performed</b>	<b>Well ID</b>	<b>Maintenance/ Repair Performed</b>
Plant McIntosh /Ash Pond 1	2/21/2022	MGWC-22	Weep hole clogged / Redrilled weephole.
Plant McIntosh /Ash Pond 1	7/11-12/2022	PZ-16	Well pad loose, well pad stabilized and repaired.
Plant McIntosh /Ash Pond 1	7/11-12/2022	PZ-17	Dirt cleaned off of well pad and silt fence added.
Plant McIntosh /Ash Pond 1	7/11-12/2022	MGWC-12	Well pad loose. Well pad stabilized

## APPENDIX A

---

*Laboratory Analytical and Field Sampling Reports  
August 2022 Monitoring Event*

## ANALYTICAL REPORT

Eurofins Savannah  
5102 LaRoche Avenue  
Savannah, GA 31404  
Tel: (912)354-7858

Laboratory Job ID: 680-219187-1  
Client Project/Site: Plant McIntosh - Ash Pond 1  
Revision: 3

For:  
Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Attn: Kristen N Jurinko



Authorized for release by:  
10/21/2022 3:59:46 PM

David Fuller, Project Manager  
(770)344-8986  
[David.Fuller@et.eurofinsus.com](mailto:David.Fuller@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Definitions/Glossary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Qualifiers

### HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
♠	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Savannah

# Sample Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-219187-1	MGWA-10	Water	08/02/22 11:20	08/03/22 11:00
680-219187-2	MGWA-11	Water	08/02/22 14:05	08/03/22 11:00
680-219187-3	EB-03	Water	08/02/22 13:50	08/03/22 11:00
680-219187-4	MGWA-5	Water	08/02/22 15:50	08/03/22 11:00
680-219187-5	MGWA-6	Water	08/02/22 12:55	08/03/22 11:00
680-219187-6	MGWA-6A	Water	08/02/22 14:20	08/03/22 11:00
680-219187-7	MGWC-12	Water	08/02/22 16:05	08/03/22 11:00
680-219187-8	FB-01	Water	08/02/22 13:10	08/03/22 11:00
680-219187-9	FD-01	Water	08/02/22 00:00	08/03/22 11:00
680-219323-1	FD-02	Water	08/04/22 00:00	08/05/22 09:20
680-219323-2	FB-02	Water	08/03/22 11:00	08/05/22 09:20
680-219323-3	MGWC-1	Water	08/03/22 11:25	08/05/22 09:20
680-219323-4	MGWC-8	Water	08/04/22 10:26	08/05/22 09:20
680-219323-5	MGWC-2	Water	08/04/22 10:00	08/05/22 09:20
680-219323-6	MGWC-3	Water	08/03/22 12:55	08/05/22 09:20
680-219323-7	MGWC-7	Water	08/03/22 11:20	08/05/22 09:20
680-219323-8	EB-04	Water	08/04/22 11:15	08/05/22 09:20

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Job ID: 680-219187-1**

**Laboratory: Eurofins Savannah**

## Narrative

### Job Narrative 680-219187-1

#### Revision 3

The report being provided is a revision of the original report sent on 8/31/2022. The report (revision 3) is being revised in order to report revised results after re-checks for EB-03 (219187-3) TDS, MGWA-6 (219187-5) fluoride, MGWA-6A (219187-6) chloride, sulfate, TDS, FB-02 (219323-2) boron, EB-04 (219323-8) boron.

#### Report revision history

Revision 2 - 10/04/2022 - Reason - In order to correct results for the mis-labeled metals bottles received in Pittsburgh and add additional batch QC results to the QC pages.

Revision 1 - 9/21/2022 - Reason - In order to add batch QC such as LCS, LCSD, and MS/MSDs to report, to correct metals detections limits for numerous samples, to add relevant certification references for Eurofins Savannah & Pittsburgh labs at the time of analysis, to include all internal Chain of Custody forms, and to also report results after a cross check of the labeling of containers. (see Comments below)

#### Comments

Per client request, the lab was requested to confirm labeling of several samples since many analytical results did not match historical results. It was determined that only the first two samples, MGWA-10 & MGWA-11, were correctly labeled at initial login for the samples that begin with 680-219187. **All other samples in Job# 680-219187-1 were mis-labeled.** Samples in the 2nd Job (680-219323), that are reported with this submittal, were labeled correctly. This revised report reflects the results after these labeling changes.

#### Receipt

The samples were received on 8/3/2022 11:00 AM and 8/5/2022 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.2°C, 2.1°C and 5.0°C

#### HPLC/IC

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 680-736293 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 680-736485 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300.0: Reanalysis of the following sample was performed outside of the analytical holding time due to sample receipt label error : EB-03 (680-219187-3).

Method 300.0: Reanalysis of the following samples were performed outside of the analytical holding time due to sample label error: MGWA-6 (680-219187-5) and MGWA-6A (680-219187-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 180-409603 recovered above the upper control limit for Boron. The method blank associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. (MB 180-408906/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### General Chemistry

Method SM 2540C: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to client request. :

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

---

## Job ID: 680-219187-1 (Continued)

---

### Laboratory: Eurofins Savannah (Continued)

EB-03 (680-219187-3) and MGWA-6A (680-219187-6). Both results are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

1

2

3

4

5

6

7

8

9

10

11

12

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWA-10**

**Lab Sample ID: 680-219187-1**

Date Collected: 08/02/22 11:20

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.4		1.0	0.20	mg/L			08/13/22 15:32	1
Fluoride	<0.040		0.10	0.040	mg/L			08/13/22 15:32	1
Sulfate	<0.40		1.0	0.40	mg/L			08/13/22 15:32	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.018		0.010	0.00089	mg/L		08/04/22 05:44	08/04/22 22:34	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/04/22 05:44	08/04/22 22:34	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/04/22 05:44	08/04/22 22:34	1
Calcium	3.1		0.50	0.14	mg/L		08/04/22 05:44	08/04/22 22:34	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/04/22 05:44	08/04/22 22:34	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/04/22 05:44	08/04/22 22:34	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/04/22 05:44	08/04/22 22:34	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/04/22 05:44	08/04/22 22:34	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:19	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 20:06	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 20:06	1
Boron	<0.060		0.080	0.060	mg/L		08/16/22 16:48	08/26/22 12:19	1
Chromium	0.0030		0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 20:06	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 20:06	1
Lithium	0.0071		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 13:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	65		10	10	mg/L			08/04/22 10:35	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.41				SU			08/02/22 11:20	1

**Client Sample ID: MGWA-11**

**Lab Sample ID: 680-219187-2**

Date Collected: 08/02/22 14:05

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.4		1.0	0.20	mg/L			08/13/22 16:10	1
Fluoride	0.065	J	0.10	0.040	mg/L			08/13/22 16:10	1
Sulfate	0.80	J	1.0	0.40	mg/L			08/13/22 16:10	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.12		0.010	0.00089	mg/L		08/04/22 05:44	08/04/22 22:42	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/04/22 05:44	08/04/22 22:42	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/04/22 05:44	08/04/22 22:42	1

Eurofins Savannah



# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWA-11**

**Lab Sample ID: 680-219187-2**

Date Collected: 08/02/22 14:05

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>36</b>		0.50	0.14	mg/L		08/04/22 05:44	08/04/22 22:42	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/04/22 05:44	08/04/22 22:42	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/04/22 05:44	08/04/22 22:42	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/04/22 05:44	08/04/22 22:42	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/04/22 05:44	08/04/22 22:42	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:30	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 20:09	1
<b>Arsenic</b>	<b>0.0022</b>		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 20:09	1
Boron	<0.060		0.080	0.060	mg/L		08/16/22 16:48	08/19/22 13:44	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 20:09	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 20:09	1
<b>Lithium</b>	<b>0.025</b>		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 13:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>210</b>		40	40	mg/L			08/04/22 10:35	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.57</b>				SU			08/02/22 14:05	1

**Client Sample ID: EB-03**

**Lab Sample ID: 680-219187-3**

Date Collected: 08/02/22 13:50

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20	H	1.0	0.20	mg/L			09/15/22 12:36	1
<b>Fluoride</b>	<b>0.042</b>	<b>J H</b>	0.10	0.040	mg/L			09/15/22 12:36	1
Sulfate	<0.40	H	1.0	0.40	mg/L			09/15/22 12:36	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 12:12	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 12:12	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 12:12	1
Calcium	<0.14		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 12:12	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 12:12	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 12:12	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 12:12	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 12:12	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:33	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: EB-03**  
Date Collected: 08/02/22 13:50  
Date Received: 08/03/22 11:00

**Lab Sample ID: 680-219187-3**  
Matrix: Water

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 19:10	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 19:10	1
Boron	<0.060	^+	0.080	0.060	mg/L		08/16/22 16:48	08/19/22 12:31	1
Chromium	<0.0015	^-	0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 19:10	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 19:10	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 12:31	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>300</b>		40	40	mg/L			08/04/22 10:35	1
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>150</b>	<b>H</b>	40	40	mg/L			10/07/22 11:58	1

**Client Sample ID: MGWA-5**  
Date Collected: 08/02/22 15:50  
Date Received: 08/03/22 11:00

**Lab Sample ID: 680-219187-4**  
Matrix: Water

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>3.5</b>		1.0	0.20	mg/L			08/13/22 16:48	1
<b>Fluoride</b>	<b>0.066</b>	<b>J</b>	0.10	0.040	mg/L			08/13/22 16:48	1
<b>Sulfate</b>	<b>2.7</b>		1.0	0.40	mg/L			08/13/22 16:48	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.031</b>		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 12:16	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 12:16	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 12:16	1
<b>Calcium</b>	<b>26</b>		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 12:16	1
<b>Cobalt</b>	<b>0.012</b>		0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 12:16	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 12:16	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 12:16	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 12:16	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:36	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 20:13	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 20:13	1
Boron	<0.060	^+	0.080	0.060	mg/L		08/16/22 16:48	08/19/22 13:48	1
Chromium	<0.0015	^-	0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 20:13	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 20:13	1
<b>Lithium</b>	<b>0.0097</b>		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 13:48	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>270</b>		40	40	mg/L			08/04/22 10:35	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWA-5**

**Lab Sample ID: 680-219187-4**

Date Collected: 08/02/22 15:50

Matrix: Water

Date Received: 08/03/22 11:00

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.45				SU			08/02/22 15:50	1

**Client Sample ID: MGWA-6**

**Lab Sample ID: 680-219187-5**

Date Collected: 08/02/22 12:55

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6	H	1.0	0.20	mg/L			10/11/22 00:08	1
Fluoride	0.055	J H	0.10	0.040	mg/L			10/11/22 00:08	1
Sulfate	2.3	H	1.0	0.40	mg/L			10/11/22 00:08	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.034		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 12:40	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 12:40	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 12:40	1
Calcium	110		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 12:40	1
Cobalt	0.00030	J	0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 12:40	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 12:40	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 12:40	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 12:40	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:40	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 20:23	1
Arsenic	0.0093		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 20:23	1
Boron	<0.060	^+	0.080	0.060	mg/L		08/16/22 16:48	08/19/22 13:51	1
Chromium	<0.0015	^-	0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 20:23	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 20:23	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 13:51	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	200		40	40	mg/L			08/04/22 10:35	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.10				SU			08/02/22 12:55	1

**Client Sample ID: MGWA-6A**

**Lab Sample ID: 680-219187-6**

Date Collected: 08/02/22 14:20

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8	H	1.0	0.20	mg/L			10/11/22 00:21	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWA-6A**

**Lab Sample ID: 680-219187-6**

Date Collected: 08/02/22 14:20

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.052	J H	0.10	0.040	mg/L			10/11/22 00:21	1
Sulfate	2.1	H	1.0	0.40	mg/L			10/11/22 00:21	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.023		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 12:32	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 12:32	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 12:32	1
Calcium	94		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 12:32	1
Cobalt	0.00034	J	0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 12:32	1
Molybdenum	0.0015	J	0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 12:32	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 12:32	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 12:32	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:43	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 20:27	1
Arsenic	0.0020		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 20:27	1
Boron	<0.060	^+	0.080	0.060	mg/L		08/16/22 16:48	08/19/22 13:55	1
Chromium	<0.0015	^	0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 20:27	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 20:27	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 13:55	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/04/22 10:35	1
Total Dissolved Solids (SM 2540C-2011)	190	H	40	40	mg/L			10/07/22 11:58	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.27				SU			08/02/22 14:20	1

**Client Sample ID: MGWC-12**

**Lab Sample ID: 680-219187-7**

Date Collected: 08/02/22 16:05

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.9		1.0	0.20	mg/L			08/13/22 17:26	1
Fluoride	0.074	J	0.10	0.040	mg/L			08/13/22 17:26	1
Sulfate	3.1		1.0	0.40	mg/L			08/13/22 17:26	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.057		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 12:43	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 12:43	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWC-12**

**Lab Sample ID: 680-219187-7**

Date Collected: 08/02/22 16:05

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 12:43	1
<b>Calcium</b>	<b>34</b>		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 12:43	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 12:43	1
<b>Molybdenum</b>	<b>0.00093</b>	<b>J</b>	0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 12:43	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 12:43	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 12:43	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:53	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0015</b>	<b>J</b>	0.0020	0.00051	mg/L		08/16/22 15:42	08/20/22 15:04	1
<b>Arsenic</b>	<b>0.0015</b>		0.0010	0.00028	mg/L		08/16/22 15:42	08/20/22 15:04	1
<b>Boron</b>	<b>0.071</b>	<b>J</b>	0.080	0.060	mg/L		08/16/22 15:42	08/20/22 15:04	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/16/22 15:42	08/20/22 15:04	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 15:42	08/20/22 15:04	1
<b>Lithium</b>	<b>0.026</b>		0.0050	0.00083	mg/L		08/16/22 15:42	08/20/22 15:04	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>150</b>		40	40	mg/L			08/04/22 10:35	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.06</b>				SU			08/02/22 16:05	1

**Client Sample ID: FB-01**

**Lab Sample ID: 680-219187-8**

Date Collected: 08/02/22 13:10

Matrix: Water

Date Received: 08/03/22 11:00

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/13/22 17:38	1
Fluoride	<0.040		0.10	0.040	mg/L			08/13/22 17:38	1
Sulfate	<0.40		1.0	0.40	mg/L			08/13/22 17:38	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 12:28	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 12:28	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 12:28	1
Calcium	<0.14		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 12:28	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 12:28	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 12:28	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 12:28	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 12:28	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: FB-01**  
Date Collected: 08/02/22 13:10  
Date Received: 08/03/22 11:00

**Lab Sample ID: 680-219187-8**  
Matrix: Water

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:57	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0019	J	0.0020	0.00051	mg/L		08/16/22 15:42	08/20/22 15:22	1
Arsenic	0.00033	J	0.0010	0.00028	mg/L		08/16/22 15:42	08/20/22 15:22	1
Boron	0.078	J	0.080	0.060	mg/L		08/16/22 15:42	08/20/22 15:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/16/22 15:42	08/20/22 15:22	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 15:42	08/20/22 15:22	1
Lithium	0.0036	J	0.0050	0.00083	mg/L		08/16/22 15:42	08/20/22 15:22	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/04/22 10:35	1

**Client Sample ID: FD-01**  
Date Collected: 08/02/22 00:00  
Date Received: 08/03/22 11:00

**Lab Sample ID: 680-219187-9**  
Matrix: Water

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.9		1.0	0.20	mg/L			08/13/22 16:23	1
Fluoride	0.076	J	0.10	0.040	mg/L			08/13/22 16:23	1
Sulfate	3.1		1.0	0.40	mg/L			08/13/22 16:23	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.032		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 12:36	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 12:36	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 12:36	1
Calcium	23		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 12:36	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 12:36	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 12:36	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 12:36	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 12:36	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 14:00	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 19:07	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 19:07	1
Boron	0.090	^+	0.080	0.060	mg/L		08/16/22 16:48	08/19/22 12:28	1
Chromium	<0.0015	^	0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 19:07	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 19:07	1
Lithium	0.0090		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 12:28	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: FD-01**  
Date Collected: 08/02/22 00:00  
Date Received: 08/03/22 11:00

**Lab Sample ID: 680-219187-9**  
Matrix: Water

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	140		40	40	mg/L			08/04/22 10:35	1

**Client Sample ID: FD-02**  
Date Collected: 08/04/22 00:00  
Date Received: 08/05/22 09:20

**Lab Sample ID: 680-219323-1**  
Matrix: Water

### Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.20	mg/L			08/16/22 21:51	1
Fluoride	0.047	J	0.10	0.040	mg/L			08/16/22 21:51	1
Sulfate	150		1.0	0.40	mg/L			08/16/22 21:51	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.041		0.010	0.00089	mg/L		08/08/22 05:21	08/08/22 19:59	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:21	08/08/22 19:59	1
Cadmium	0.00020	J	0.0025	0.000078	mg/L		08/08/22 05:21	08/08/22 19:59	1
Calcium	97		0.50	0.14	mg/L		08/08/22 05:21	08/08/22 19:59	1
Cobalt	0.0013	J	0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 19:59	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:21	08/08/22 19:59	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:21	08/08/22 19:59	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:21	08/08/22 19:59	1

### Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:39	1

### Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 13:33	1
Arsenic	0.00028	J	0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 13:33	1
Boron	2.0		0.080	0.060	mg/L		08/19/22 12:45	08/26/22 10:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 13:33	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 13:33	1
Lithium	0.0071		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 13:33	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	470		40	40	mg/L			08/09/22 10:35	1

**Client Sample ID: FB-02**  
Date Collected: 08/03/22 11:00  
Date Received: 08/05/22 09:20

**Lab Sample ID: 680-219323-2**  
Matrix: Water

### Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/17/22 16:04	1
Fluoride	<0.040		0.10	0.040	mg/L			08/17/22 16:04	1
Sulfate	<0.40		1.0	0.40	mg/L			08/17/22 16:04	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: FB-02**

**Lab Sample ID: 680-219323-2**

Date Collected: 08/03/22 11:00

Matrix: Water

Date Received: 08/05/22 09:20

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		08/08/22 05:21	08/08/22 20:05	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:21	08/08/22 20:05	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/08/22 05:21	08/08/22 20:05	1
Calcium	<0.14		0.50	0.14	mg/L		08/08/22 05:21	08/08/22 20:05	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 20:05	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:21	08/08/22 20:05	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:21	08/08/22 20:05	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:21	08/08/22 20:05	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:42	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 13:37	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 13:37	1
Boron	<0.060		0.080	0.060	mg/L		10/20/22 11:45	10/21/22 10:56	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 13:37	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 13:37	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 13:37	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/08/22 09:37	1

**Client Sample ID: MGWC-1**

**Lab Sample ID: 680-219323-3**

Date Collected: 08/03/22 11:25

Matrix: Water

Date Received: 08/05/22 09:20

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.20	mg/L			08/17/22 16:16	1
Fluoride	0.12		0.10	0.040	mg/L			08/17/22 16:16	1
Sulfate	140		1.0	0.40	mg/L			08/17/22 16:16	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.11		0.010	0.00089	mg/L		08/08/22 05:21	08/08/22 20:02	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:21	08/08/22 20:02	1
Cadmium	0.000085	J	0.0025	0.000078	mg/L		08/08/22 05:21	08/08/22 20:02	1
Calcium	110		0.50	0.14	mg/L		08/08/22 05:21	08/08/22 20:02	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 20:02	1
Molybdenum	0.0011	J	0.015	0.00086	mg/L		08/08/22 05:21	08/08/22 20:02	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:21	08/08/22 20:02	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:21	08/08/22 20:02	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:44	1

Eurofins Savannah



# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWC-1**

**Lab Sample ID: 680-219323-3**

Date Collected: 08/03/22 11:25

Matrix: Water

Date Received: 08/05/22 09:20

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 13:40	1
<b>Arsenic</b>	<b>0.0015</b>		0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 13:40	1
<b>Boron</b>	<b>1.7</b>		0.080	0.060	mg/L		08/19/22 12:45	08/26/22 10:20	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 13:40	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 13:40	1
<b>Lithium</b>	<b>0.010</b>		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 13:40	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>440</b>		40	40	mg/L			08/08/22 09:37	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.23</b>				SU			08/03/22 11:25	1

**Client Sample ID: MGWC-8**

**Lab Sample ID: 680-219323-4**

Date Collected: 08/04/22 10:26

Matrix: Water

Date Received: 08/05/22 09:20

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>13</b>		1.0	0.20	mg/L			08/17/22 16:29	1
<b>Fluoride</b>	<b>0.087</b>	<b>J</b>	0.10	0.040	mg/L			08/17/22 16:29	1

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Sulfate</b>	<b>350</b>		5.0	2.0	mg/L			08/18/22 12:35	5

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>0.043</b>		0.010	0.00089	mg/L		08/08/22 05:21	08/08/22 20:12	1
<b>Beryllium</b>	<b>0.00064</b>	<b>J</b>	0.0025	0.00020	mg/L		08/08/22 05:21	08/08/22 20:12	1
<b>Cadmium</b>	<b>0.0037</b>		0.0025	0.000078	mg/L		08/08/22 05:21	08/08/22 20:12	1
<b>Calcium</b>	<b>100</b>		0.50	0.14	mg/L		08/08/22 05:21	08/08/22 20:12	1
<b>Cobalt</b>	<b>0.0092</b>		0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 20:12	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:21	08/08/22 20:12	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:21	08/08/22 20:12	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:21	08/08/22 20:12	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.00068</b>		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:47	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 13:44	1
<b>Arsenic</b>	<b>0.00075</b>	<b>J</b>	0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 13:44	1
<b>Boron</b>	<b>4.3</b>		0.080	0.060	mg/L		08/19/22 12:45	08/26/22 10:24	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 13:44	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 13:44	1
<b>Lithium</b>	<b>0.021</b>		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 13:44	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Client Sample ID: MGWC-8

Lab Sample ID: 680-219323-4

Date Collected: 08/04/22 10:26

Matrix: Water

Date Received: 08/05/22 09:20

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	620		40	40	mg/L			08/09/22 10:35	1

### Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.50				SU			08/04/22 10:26	1

## Client Sample ID: MGWC-2

Lab Sample ID: 680-219323-5

Date Collected: 08/04/22 10:00

Matrix: Water

Date Received: 08/05/22 09:20

### Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.20	mg/L			08/17/22 16:42	1
Fluoride	0.072	J	0.10	0.040	mg/L			08/17/22 16:42	1
Sulfate	150		1.0	0.40	mg/L			08/17/22 16:42	1

### Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.042		0.010	0.00089	mg/L		08/08/22 05:21	08/08/22 20:15	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:21	08/08/22 20:15	1
Cadmium	0.00020	J	0.0025	0.000078	mg/L		08/08/22 05:21	08/08/22 20:15	1
Calcium	98		0.50	0.14	mg/L		08/08/22 05:21	08/08/22 20:15	1
Cobalt	0.0013	J	0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 20:15	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:21	08/08/22 20:15	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:21	08/08/22 20:15	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:21	08/08/22 20:15	1

### Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:49	1

### Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 13:59	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 13:59	1
Boron	1.9		0.080	0.060	mg/L		08/19/22 12:45	08/26/22 10:38	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 13:59	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 13:59	1
Lithium	0.0063		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 13:59	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	480		40	40	mg/L			08/09/22 10:35	1

### Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.37				SU			08/04/22 10:00	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWC-3**

**Lab Sample ID: 680-219323-6**

Date Collected: 08/03/22 12:55

Matrix: Water

Date Received: 08/05/22 09:20

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.20	mg/L			08/17/22 16:55	1
Fluoride	0.079	J	0.10	0.040	mg/L			08/17/22 16:55	1
Sulfate	130		1.0	0.40	mg/L			08/17/22 16:55	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.15		0.010	0.00089	mg/L		08/08/22 05:21	08/08/22 20:17	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:21	08/08/22 20:17	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/08/22 05:21	08/08/22 20:17	1
Calcium	110		0.50	0.14	mg/L		08/08/22 05:21	08/08/22 20:17	1
Cobalt	0.00051	J	0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 20:17	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:21	08/08/22 20:17	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:21	08/08/22 20:17	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:21	08/08/22 20:17	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:52	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 14:02	1
Arsenic	0.0016		0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 14:02	1
Boron	0.76		0.080	0.060	mg/L		08/19/22 12:45	08/26/22 10:55	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 14:02	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 14:02	1
Lithium	0.013		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 14:02	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	430		40	40	mg/L			08/08/22 09:37	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.91				SU			08/03/22 12:55	1

**Client Sample ID: MGWC-7**

**Lab Sample ID: 680-219323-7**

Date Collected: 08/03/22 11:20

Matrix: Water

Date Received: 08/05/22 09:20

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		1.0	0.20	mg/L			08/17/22 17:08	1
Fluoride	0.20		0.10	0.040	mg/L			08/17/22 17:08	1
Sulfate	220		1.0	0.40	mg/L			08/17/22 17:08	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.018		0.010	0.00089	mg/L		08/08/22 05:43	08/08/22 12:50	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:43	08/08/22 12:50	1
Cadmium	0.00041	J	0.0025	0.000078	mg/L		08/08/22 05:43	08/08/22 12:50	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWC-7**

**Lab Sample ID: 680-219323-7**

Date Collected: 08/03/22 11:20

Matrix: Water

Date Received: 08/05/22 09:20

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	66		0.50	0.14	mg/L		08/08/22 05:43	08/08/22 12:50	1
Cobalt	0.0044		0.0025	0.00022	mg/L		08/08/22 05:43	08/08/22 12:50	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:43	08/08/22 12:50	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:43	08/08/22 12:50	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:43	08/08/22 12:50	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:55	1

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 14:06	1
Arsenic	0.00052	J	0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 14:06	1
Boron	2.3		0.080	0.060	mg/L		08/19/22 12:45	08/26/22 10:59	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 14:06	1
Lead	0.00021	J	0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 14:06	1
Lithium	0.13		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 14:06	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	400		40	40	mg/L			08/08/22 09:37	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.86				SU			08/03/22 11:20	1

**Client Sample ID: EB-04**

**Lab Sample ID: 680-219323-8**

Date Collected: 08/04/22 11:15

Matrix: Water

Date Received: 08/05/22 09:20

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/17/22 17:21	1
Fluoride	<0.040		0.10	0.040	mg/L			08/17/22 17:21	1
Sulfate	<0.40		1.0	0.40	mg/L			08/17/22 17:21	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		08/08/22 05:43	08/08/22 12:47	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:43	08/08/22 12:47	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/08/22 05:43	08/08/22 12:47	1
Calcium	<0.14		0.50	0.14	mg/L		08/08/22 05:43	08/08/22 12:47	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/08/22 05:43	08/08/22 12:47	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:43	08/08/22 12:47	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:43	08/08/22 12:47	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:43	08/08/22 12:47	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/12/22 14:16	08/15/22 12:36	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: EB-04**  
**Date Collected: 08/04/22 11:15**  
**Date Received: 08/05/22 09:20**

**Lab Sample ID: 680-219323-8**  
**Matrix: Water**

**Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 14:09	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 14:09	1
Boron	<0.060		0.080	0.060	mg/L		10/20/22 11:45	10/21/22 11:00	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 14:09	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 14:09	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 14:09	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/09/22 10:35	1



# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

**Lab Sample ID: MB 680-735701/11**  
**Matrix: Water**  
**Analysis Batch: 735701**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/13/22 14:41	1
Fluoride	<0.040		0.10	0.040	mg/L			08/13/22 14:41	1
Sulfate	<0.40		1.0	0.40	mg/L			08/13/22 14:41	1

**Lab Sample ID: LCS 680-735701/12**  
**Matrix: Water**  
**Analysis Batch: 735701**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.1		mg/L		101	90 - 110
Fluoride	2.00	1.97		mg/L		98	90 - 110
Sulfate	10.0	9.80		mg/L		98	90 - 110

**Lab Sample ID: LCSD 680-735701/13**  
**Matrix: Water**  
**Analysis Batch: 735701**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.1		mg/L		101	90 - 110	0	15
Fluoride	2.00	1.98		mg/L		99	90 - 110	1	15
Sulfate	10.0	9.83		mg/L		98	90 - 110	0	15

**Lab Sample ID: 680-219187-1 MS**  
**Matrix: Water**  
**Analysis Batch: 735701**

**Client Sample ID: MGWA-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7.4		10.0	17.9		mg/L		105	80 - 120
Fluoride	<0.040		2.00	2.05		mg/L		103	80 - 120
Sulfate	<0.40		10.0	10.1		mg/L		101	80 - 120

**Lab Sample ID: 680-219187-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 735701**

**Client Sample ID: MGWA-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7.4		10.0	18.0		mg/L		106	80 - 120	1	15
Fluoride	<0.040		2.00	2.08		mg/L		104	80 - 120	1	15
Sulfate	<0.40		10.0	10.2		mg/L		102	80 - 120	1	15

**Lab Sample ID: MB 680-736072/2**  
**Matrix: Water**  
**Analysis Batch: 736072**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/16/22 10:56	1
Fluoride	<0.040		0.10	0.040	mg/L			08/16/22 10:56	1
Sulfate	<0.40		1.0	0.40	mg/L			08/16/22 10:56	1

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 680-736072/3**  
**Matrix: Water**  
**Analysis Batch: 736072**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.0		mg/L		100	90 - 110
Fluoride	2.00	1.92		mg/L		96	90 - 110
Sulfate	10.0	9.70		mg/L		97	90 - 110

**Lab Sample ID: LCSD 680-736072/4**  
**Matrix: Water**  
**Analysis Batch: 736072**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.1		mg/L		101	90 - 110	0	15
Fluoride	2.00	1.93		mg/L		97	90 - 110	0	15
Sulfate	10.0	9.75		mg/L		98	90 - 110	0	15

**Lab Sample ID: 160-46291-D-1 MS**  
**Matrix: Water**  
**Analysis Batch: 736072**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.6		10.0	15.9		mg/L		103	80 - 120
Fluoride	0.15		2.00	2.06		mg/L		96	80 - 120
Sulfate	39		10.0	48.4		mg/L		97	80 - 120

**Lab Sample ID: 160-46291-D-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 736072**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.6		10.0	16.1		mg/L		105	80 - 120	1	15
Fluoride	0.15		2.00	2.16		mg/L		101	80 - 120	5	15
Sulfate	39		10.0	48.6		mg/L		99	80 - 120	0	15

**Lab Sample ID: MB 680-736073/34**  
**Matrix: Water**  
**Analysis Batch: 736073**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/16/22 19:06	1
Fluoride	<0.040		0.10	0.040	mg/L			08/16/22 19:06	1
Sulfate	<0.40		1.0	0.40	mg/L			08/16/22 19:06	1

**Lab Sample ID: LCS 680-736073/35**  
**Matrix: Water**  
**Analysis Batch: 736073**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.98		mg/L		100	90 - 110
Fluoride	2.00	1.92		mg/L		96	90 - 110
Sulfate	10.0	9.54		mg/L		95	90 - 110

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCSD 680-736073/36**  
**Matrix: Water**  
**Analysis Batch: 736073**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.97		mg/L		100	90 - 110	0	15
Fluoride	2.00	1.92		mg/L		96	90 - 110	0	15
Sulfate	10.0	9.58		mg/L		96	90 - 110	0	15

**Lab Sample ID: 660-122451-G-1 MS**  
**Matrix: Water**  
**Analysis Batch: 736073**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	42		10.0	52.4	4	mg/L		102	80 - 120
Fluoride	0.21		2.00	2.25		mg/L		102	80 - 120
Sulfate	2.3		10.0	12.6		mg/L		102	80 - 120

**Lab Sample ID: 660-122451-G-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 736073**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	42		10.0	52.7	4	mg/L		105	80 - 120	1	15
Fluoride	0.21		2.00	2.33		mg/L		106	80 - 120	3	15
Sulfate	2.3		10.0	12.6		mg/L		103	80 - 120	1	15

**Lab Sample ID: MB 680-736293/2**  
**Matrix: Water**  
**Analysis Batch: 736293**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/17/22 10:45	1
Fluoride	<0.040		0.10	0.040	mg/L			08/17/22 10:45	1
Sulfate	<0.40		1.0	0.40	mg/L			08/17/22 10:45	1

**Lab Sample ID: LCS 680-736293/3**  
**Matrix: Water**  
**Analysis Batch: 736293**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.2		mg/L		102	90 - 110
Fluoride	2.00	2.02		mg/L		101	90 - 110
Sulfate	10.0	9.62		mg/L		96	90 - 110

**Lab Sample ID: LCSD 680-736293/4**  
**Matrix: Water**  
**Analysis Batch: 736293**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.2		mg/L		102	90 - 110	0	15
Fluoride	2.00	2.06		mg/L		103	90 - 110	2	15
Sulfate	10.0	10.2		mg/L		102	90 - 110	6	15

Eurofins Savannah



# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 660-122486-S-2 MS**  
**Matrix: Water**  
**Analysis Batch: 736293**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	3700		250	3140	4	mg/L		-213	80 - 120
Fluoride	<1.0	F1	50.0	56.4		mg/L		113	80 - 120
Sulfate	520	F1	250	678	F1	mg/L		64	80 - 120

**Lab Sample ID: 660-122486-S-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 736293**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3700		250	3290	4	mg/L		-151	80 - 120	5	15
Fluoride	<1.0	F1	50.0	60.9	F1	mg/L		122	80 - 120	8	15
Sulfate	520	F1	250	727		mg/L		83	80 - 120	7	15

**Lab Sample ID: MB 680-736485/2**  
**Matrix: Water**  
**Analysis Batch: 736485**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/18/22 11:08	1
Fluoride	<0.040		0.10	0.040	mg/L			08/18/22 11:08	1
Sulfate	<0.40		1.0	0.40	mg/L			08/18/22 11:08	1

**Lab Sample ID: LCS 680-736485/3**  
**Matrix: Water**  
**Analysis Batch: 736485**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.5		mg/L		105	90 - 110
Fluoride	2.00	2.14		mg/L		107	90 - 110
Sulfate	10.0	10.1		mg/L		101	90 - 110

**Lab Sample ID: LCSD 680-736485/4**  
**Matrix: Water**  
**Analysis Batch: 736485**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.5		mg/L		105	90 - 110	0	15
Fluoride	2.00	2.14		mg/L		107	90 - 110	0	15
Sulfate	10.0	10.1		mg/L		101	90 - 110	0	15

**Lab Sample ID: 680-218944-G-1 MS**  
**Matrix: Water**  
**Analysis Batch: 736485**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	210		20.0	224	4	mg/L		86	80 - 120
Fluoride	<0.080	F1	4.00	4.99	F1	mg/L		125	80 - 120
Sulfate	<0.80		20.0	20.9		mg/L		105	80 - 120

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 680-218944-G-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 736485**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	210		20.0	222	4	mg/L		75	80 - 120	1	15
Fluoride	<0.080	F1	4.00	4.83	F1	mg/L		121	80 - 120	3	15
Sulfate	<0.80		20.0	20.1		mg/L		101	80 - 120	4	15

**Lab Sample ID: MB 680-740506/2**  
**Matrix: Water**  
**Analysis Batch: 740506**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			09/15/22 10:59	1
Fluoride	<0.040		0.10	0.040	mg/L			09/15/22 10:59	1
Sulfate	<0.40		1.0	0.40	mg/L			09/15/22 10:59	1

**Lab Sample ID: LCS 680-740506/3**  
**Matrix: Water**  
**Analysis Batch: 740506**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.93		mg/L		99	90 - 110
Fluoride	2.00	1.99		mg/L		99	90 - 110
Sulfate	10.0	10.5		mg/L		105	90 - 110

**Lab Sample ID: LCSD 680-740506/4**  
**Matrix: Water**  
**Analysis Batch: 740506**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.95		mg/L		100	90 - 110	0	15
Fluoride	2.00	2.02		mg/L		101	90 - 110	2	15
Sulfate	10.0	10.6		mg/L		106	90 - 110	1	15

**Lab Sample ID: 660-123636-I-1 MS**  
**Matrix: Water**  
**Analysis Batch: 740506**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	8.7		10.0	19.3		mg/L		106	80 - 120
Fluoride	<0.040		2.00	2.05		mg/L		102	80 - 120
Sulfate	<0.40		10.0	9.90		mg/L		99	80 - 120

**Lab Sample ID: 660-123636-I-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 740506**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.7		10.0	19.4		mg/L		107	80 - 120	0	15
Fluoride	<0.040		2.00	2.08		mg/L		104	80 - 120	2	15
Sulfate	<0.40		10.0	10.1		mg/L		101	80 - 120	3	15

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: MB 680-744497/32**  
**Matrix: Water**  
**Analysis Batch: 744497**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			10/10/22 19:55	1
Fluoride	<0.040		0.10	0.040	mg/L			10/10/22 19:55	1
Sulfate	<0.40		1.0	0.40	mg/L			10/10/22 19:55	1

**Lab Sample ID: LCS 680-744497/33**  
**Matrix: Water**  
**Analysis Batch: 744497**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.4		mg/L		104	90 - 110
Fluoride	2.00	2.09		mg/L		104	90 - 110
Sulfate	10.0	10.4		mg/L		104	90 - 110

**Lab Sample ID: LCSD 680-744497/34**  
**Matrix: Water**  
**Analysis Batch: 744497**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.3		mg/L		103	90 - 110	0	15
Fluoride	2.00	2.09		mg/L		105	90 - 110	0	15
Sulfate	10.0	10.5		mg/L		105	90 - 110	1	15

**Lab Sample ID: 680-221593-E-22 MS**  
**Matrix: Water**  
**Analysis Batch: 744497**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	12000		1000	12600	4	mg/L		94	80 - 120
Fluoride	<4.0		200	205		mg/L		102	80 - 120
Sulfate	1500		1000	2520		mg/L		104	80 - 120

**Lab Sample ID: 680-221593-E-22 MSD**  
**Matrix: Water**  
**Analysis Batch: 744497**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	12000		1000	12600	4	mg/L		92	80 - 120	0	15
Fluoride	<4.0		200	205		mg/L		103	80 - 120	0	15
Sulfate	1500		1000	2510		mg/L		103	80 - 120	0	15

## Method: 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 680-734013/1-A**  
**Matrix: Water**  
**Analysis Batch: 735910**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734013**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		08/04/22 05:44	08/04/22 21:40	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/04/22 05:44	08/04/22 21:40	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/04/22 05:44	08/04/22 21:40	1

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: MB 680-734013/1-A**  
**Matrix: Water**  
**Analysis Batch: 735910**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734013**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.14		0.50	0.14	mg/L		08/04/22 05:44	08/04/22 21:40	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/04/22 05:44	08/04/22 21:40	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/04/22 05:44	08/04/22 21:40	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/04/22 05:44	08/04/22 21:40	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/04/22 05:44	08/04/22 21:40	1

**Lab Sample ID: LCS 680-734013/2-A**  
**Matrix: Water**  
**Analysis Batch: 735910**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734013**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.100	0.105		mg/L		105	80 - 120
Beryllium	0.0500	0.0527		mg/L		105	80 - 120
Cadmium	0.0500	0.0515		mg/L		103	80 - 120
Calcium	5.00	5.38		mg/L		108	80 - 120
Cobalt	0.0500	0.0560		mg/L		112	80 - 120
Molybdenum	0.100	0.103		mg/L		103	80 - 120
Selenium	0.100	0.107		mg/L		107	80 - 120
Thallium	0.0500	0.0526		mg/L		105	80 - 120

**Lab Sample ID: 680-219140-B-4-B MS**  
**Matrix: Water**  
**Analysis Batch: 735910**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.029		0.100	0.119		mg/L		91	75 - 125
Beryllium	<0.00020		0.0500	0.0477		mg/L		95	75 - 125
Cadmium	<0.000078		0.0500	0.0455		mg/L		91	75 - 125
Calcium	4.3		5.00	8.89		mg/L		92	75 - 125
Cobalt	<0.00022		0.0500	0.0487		mg/L		98	75 - 125
Molybdenum	0.00097	J	0.100	0.0901		mg/L		89	75 - 125
Selenium	<0.0012		0.100	0.0920		mg/L		92	75 - 125
Thallium	<0.00026		0.0500	0.0476		mg/L		95	75 - 125

**Lab Sample ID: 680-219140-B-4-C MSD**  
**Matrix: Water**  
**Analysis Batch: 735910**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.029		0.100	0.126		mg/L		97	75 - 125	5	20
Beryllium	<0.00020		0.0500	0.0503		mg/L		101	75 - 125	5	20
Cadmium	<0.000078		0.0500	0.0478		mg/L		96	75 - 125	5	20
Calcium	4.3		5.00	9.22		mg/L		99	75 - 125	4	20
Cobalt	<0.00022		0.0500	0.0513		mg/L		103	75 - 125	5	20
Molybdenum	0.00097	J	0.100	0.0959		mg/L		95	75 - 125	6	20
Selenium	<0.0012		0.100	0.0983		mg/L		98	75 - 125	7	20
Thallium	<0.00026		0.0500	0.0492		mg/L		98	75 - 125	3	20

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: MB 680-734603/1-A**  
**Matrix: Water**  
**Analysis Batch: 734763**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734603**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.050	0.00089	mg/L		08/08/22 05:04	08/08/22 12:29	1
Beryllium	<0.00020		0.013	0.00020	mg/L		08/08/22 05:04	08/08/22 12:29	1
Cadmium	<0.000078		0.013	0.000078	mg/L		08/08/22 05:04	08/08/22 12:29	1
Calcium	<0.14		2.5	0.14	mg/L		08/08/22 05:04	08/08/22 12:29	1
Cobalt	<0.00022		0.013	0.00022	mg/L		08/08/22 05:04	08/08/22 12:29	1
Molybdenum	<0.00086		0.075	0.00086	mg/L		08/08/22 05:04	08/08/22 12:29	1
Selenium	<0.0012		0.025	0.0012	mg/L		08/08/22 05:04	08/08/22 12:29	1
Thallium	<0.00026		0.0050	0.00026	mg/L		08/08/22 05:04	08/08/22 12:29	1

**Lab Sample ID: LCS 680-734603/2-A**  
**Matrix: Water**  
**Analysis Batch: 734763**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734603**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.100	0.105		mg/L		105	80 - 120
Beryllium	0.0500	0.0550		mg/L		110	80 - 120
Cadmium	0.0500	0.0523		mg/L		105	80 - 120
Calcium	5.00	5.43		mg/L		109	80 - 120
Cobalt	0.0500	0.0556		mg/L		111	80 - 120
Molybdenum	0.100	0.109		mg/L		109	80 - 120
Selenium	0.100	0.109		mg/L		109	80 - 120
Thallium	0.0500	0.0553		mg/L		111	80 - 120

**Lab Sample ID: 660-122511-A-2-B MS**  
**Matrix: Water**  
**Analysis Batch: 734763**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.014	J	0.100	0.116		mg/L		101	75 - 125
Beryllium	<0.00020		0.0500	0.0511		mg/L		102	75 - 125
Cadmium	<0.000078		0.0500	0.0504		mg/L		101	75 - 125
Calcium	92		5.00	96.6	4	mg/L		97	75 - 125
Cobalt	<0.00022		0.0500	0.0527		mg/L		106	75 - 125
Molybdenum	0.0038	J	0.100	0.108		mg/L		105	75 - 125
Selenium	<0.0012		0.100	0.105		mg/L		104	75 - 125
Thallium	<0.00026		0.0500	0.0533		mg/L		107	75 - 125

**Lab Sample ID: 660-122511-A-2-C MSD**  
**Matrix: Water**  
**Analysis Batch: 734763**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.014	J	0.100	0.111		mg/L		97	75 - 125	4	20
Beryllium	<0.00020		0.0500	0.0493		mg/L		99	75 - 125	4	20
Cadmium	<0.000078		0.0500	0.0484		mg/L		97	75 - 125	4	20
Calcium	92		5.00	92.4	4	mg/L		13	75 - 125	4	20
Cobalt	<0.00022		0.0500	0.0503		mg/L		101	75 - 125	5	20
Molybdenum	0.0038	J	0.100	0.103		mg/L		99	75 - 125	5	20
Selenium	<0.0012		0.100	0.0995		mg/L		99	75 - 125	5	20

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: 660-122511-A-2-C MSD**  
**Matrix: Water**  
**Analysis Batch: 734763**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	<0.00026		0.0500	0.0510		mg/L		102	75 - 125	4	20

**Lab Sample ID: MB 680-734604/1-A**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734604**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		08/08/22 05:21	08/08/22 19:16	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/08/22 05:21	08/08/22 19:16	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/08/22 05:21	08/08/22 19:16	1
Calcium	<0.14		0.50	0.14	mg/L		08/08/22 05:21	08/08/22 19:16	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 19:16	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/08/22 05:21	08/08/22 19:16	1
Selenium	<0.0012		0.0050	0.0012	mg/L		08/08/22 05:21	08/08/22 19:16	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/08/22 05:21	08/08/22 19:16	1

**Lab Sample ID: LCS 680-734604/2-A**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734604**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.100	0.0998		mg/L		100	80 - 120
Beryllium	0.0500	0.0493		mg/L		99	80 - 120
Cadmium	0.0500	0.0492		mg/L		98	80 - 120
Calcium	5.00	5.14		mg/L		103	80 - 120
Cobalt	0.0500	0.0517		mg/L		103	80 - 120
Molybdenum	0.100	0.0995		mg/L		99	80 - 120
Selenium	0.100	0.104		mg/L		103	80 - 120
Thallium	0.0500	0.0505		mg/L		101	80 - 120

**Lab Sample ID: MB 680-740331/1-A**  
**Matrix: Water**  
**Analysis Batch: 740573**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 740331**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/14/22 12:54	09/15/22 11:42	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/14/22 12:54	09/15/22 11:42	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		09/14/22 12:54	09/15/22 11:42	1
Calcium	<0.14		0.50	0.14	mg/L		09/14/22 12:54	09/15/22 11:42	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/14/22 12:54	09/15/22 11:42	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		09/14/22 12:54	09/15/22 11:42	1
Selenium	<0.0012		0.0050	0.0012	mg/L		09/14/22 12:54	09/15/22 11:42	1
Thallium	<0.00026		0.0010	0.00026	mg/L		09/14/22 12:54	09/15/22 11:42	1

**Lab Sample ID: LCS 680-740331/2-A**  
**Matrix: Water**  
**Analysis Batch: 740573**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 740331**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.100	0.105		mg/L		105	80 - 120

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 680-740331/2-A**  
**Matrix: Water**  
**Analysis Batch: 740573**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 740331**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.0500	0.0563		mg/L		113	80 - 120
Cadmium	0.0500	0.0513		mg/L		103	80 - 120
Calcium	5.00	5.38		mg/L		108	80 - 120
Cobalt	0.0500	0.0576		mg/L		115	80 - 120
Molybdenum	0.100	0.108		mg/L		108	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Thallium	0.0500	0.0516		mg/L		103	80 - 120

**Lab Sample ID: 680-220983-B-1-E MS**  
**Matrix: Water**  
**Analysis Batch: 740573**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 740331**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.020		0.100	0.133		mg/L		113	75 - 125
Beryllium	<0.00020		0.0500	0.0579		mg/L		116	75 - 125
Cadmium	<0.000078		0.0500	0.0575		mg/L		115	75 - 125
Calcium	16	F1	5.00	21.5		mg/L		114	75 - 125
Cobalt	0.00027	J	0.0500	0.0623		mg/L		124	75 - 125
Molybdenum	<0.00086		0.100	0.120		mg/L		120	75 - 125
Selenium	<0.0012		0.100	0.116		mg/L		116	75 - 125
Thallium	<0.00026		0.0500	0.0573		mg/L		115	75 - 125

**Lab Sample ID: 680-220983-B-1-F MSD**  
**Matrix: Water**  
**Analysis Batch: 740573**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 740331**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Barium	0.020		0.100	0.125		mg/L		105	75 - 125	6	20
Beryllium	<0.00020		0.0500	0.0525		mg/L		105	75 - 125	10	20
Cadmium	<0.000078		0.0500	0.0531		mg/L		106	75 - 125	8	20
Calcium	16	F1	5.00	22.2	F1	mg/L		129	75 - 125	3	20
Cobalt	0.00027	J	0.0500	0.0585		mg/L		117	75 - 125	6	20
Molybdenum	<0.00086		0.100	0.114		mg/L		114	75 - 125	5	20
Selenium	<0.0012		0.100	0.117		mg/L		117	75 - 125	1	20
Thallium	<0.00026		0.0500	0.0536		mg/L		107	75 - 125	7	20

**Lab Sample ID: 410-93040-G-1-E MS**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Matrix Spike**  
**Prep Type: Dissolved**  
**Prep Batch: 734604**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.10		0.100	0.226		mg/L		122	75 - 125
Beryllium	<0.00020		0.0500	0.0586		mg/L		117	75 - 125
Cadmium	<0.000078		0.0500	0.0561		mg/L		112	75 - 125
Calcium	88		5.00	98.9	4	mg/L		224	75 - 125
Cobalt	<0.00022		0.0500	0.0586		mg/L		117	75 - 125
Molybdenum	0.027		0.100	0.148		mg/L		121	75 - 125
Selenium	<0.0012		0.100	0.115		mg/L		114	75 - 125
Thallium	<0.00026		0.0500	0.0592		mg/L		118	75 - 125

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: 410-93040-G-1-F MSD**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Dissolved**  
**Prep Batch: 734604**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.10		0.100	0.224		mg/L		120	75 - 125	1	20
Beryllium	<0.00020		0.0500	0.0583		mg/L		117	75 - 125	1	20
Cadmium	<0.000078		0.0500	0.0552		mg/L		110	75 - 125	2	20
Calcium	88		5.00	97.9	4	mg/L		205	75 - 125	1	20
Cobalt	<0.00022		0.0500	0.0585		mg/L		117	75 - 125	0	20
Molybdenum	0.027		0.100	0.148		mg/L		121	75 - 125	0	20
Selenium	<0.0012		0.100	0.113		mg/L		113	75 - 125	1	20
Thallium	<0.00026		0.0500	0.0591		mg/L		118	75 - 125	0	20

**Lab Sample ID: 410-93040-A-1-B DU**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Duplicate**  
**Prep Type: Dissolved**  
**Prep Batch: 734604**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	0.10		0.0980		mg/L		6	20
Beryllium	<0.00020		<0.00020		mg/L		NC	20
Cadmium	<0.000078		<0.000078		mg/L		NC	20
Calcium	88		81.6		mg/L		7	20
Cobalt	<0.00022		<0.00022		mg/L		NC	20
Molybdenum	0.027		0.0257		mg/L		5	20
Selenium	<0.0012		<0.0012		mg/L		NC	20
Thallium	<0.00026		<0.00026		mg/L		NC	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 680-734147/12-A**  
**Matrix: Water**  
**Analysis Batch: 734769**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 734147**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/04/22 13:24	08/05/22 13:13	1

**Lab Sample ID: LCS 680-734147/13-A**  
**Matrix: Water**  
**Analysis Batch: 734769**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 734147**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.00243		mg/L		97	80 - 120

**Lab Sample ID: 680-219187-1 MS**  
**Matrix: Water**  
**Analysis Batch: 734769**

**Client Sample ID: MGWA-10**  
**Prep Type: Total/NA**  
**Prep Batch: 734147**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000080		0.00100	0.000977		mg/L		98	80 - 120



# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID: 680-219187-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 734769**

**Client Sample ID: MGWA-10**  
**Prep Type: Total/NA**  
**Prep Batch: 734147**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000080		0.00100	0.000945		mg/L		95	80 - 120	3	20

**Lab Sample ID: MB 680-735012/1-A**  
**Matrix: Water**  
**Analysis Batch: 735232**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 735012**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/09/22 16:24	08/10/22 11:09	1

**Lab Sample ID: LCS 680-735012/2-A**  
**Matrix: Water**  
**Analysis Batch: 735232**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 735012**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.00258		mg/L		103	80 - 120

**Lab Sample ID: 660-122564-B-5-E MS**  
**Matrix: Water**  
**Analysis Batch: 735232**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 735012**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000080	F1	0.00100	0.000609	F1	mg/L		61	80 - 120

**Lab Sample ID: 660-122564-B-5-F MSD**  
**Matrix: Water**  
**Analysis Batch: 735232**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 735012**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000080	F1	0.00100	0.000619	F1	mg/L		62	80 - 120	2	20

**Lab Sample ID: MB 680-735626/1-A**  
**Matrix: Water**  
**Analysis Batch: 735903**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 735626**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/12/22 14:16	08/15/22 11:56	1

**Lab Sample ID: LCS 680-735626/2-A**  
**Matrix: Water**  
**Analysis Batch: 735903**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 735626**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.00226		mg/L		90	80 - 120

**Lab Sample ID: 660-122723-B-2-D MS**  
**Matrix: Water**  
**Analysis Batch: 735903**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 735626**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000080	F1	0.00100	0.000503	F1	mg/L		50	80 - 120

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: 660-122723-B-2-E MSD**  
**Matrix: Water**  
**Analysis Batch: 735903**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 735626**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000080	F1	0.00100	0.000511	F1	mg/L		51	80 - 120	2	20

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-408906/1-A**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408906**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 15:42	08/20/22 14:50	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/16/22 15:42	08/20/22 14:50	1
Boron	<0.060	^+	0.080	0.060	mg/L		08/16/22 15:42	08/20/22 14:50	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/16/22 15:42	08/20/22 14:50	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 15:42	08/20/22 14:50	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/16/22 15:42	08/20/22 14:50	1

**Lab Sample ID: LCS 180-408906/2-A**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408906**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.250	0.211		mg/L		84	80 - 120
Arsenic	1.00	0.887		mg/L		89	80 - 120
Boron	1.25	1.22		mg/L		98	80 - 120
Chromium	0.500	0.520		mg/L		104	80 - 120
Lead	0.500	0.539		mg/L		108	80 - 120
Lithium	0.500	0.522		mg/L		104	80 - 120

**Lab Sample ID: 680-219187-7 MS**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: MGWC-12**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408906**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0015	J	0.250	0.224		mg/L		89	75 - 125
Arsenic	0.0015		1.00	1.06		mg/L		106	75 - 125
Boron	0.071	J	1.25	1.24		mg/L		93	75 - 125
Chromium	<0.0015		0.500	0.525		mg/L		105	75 - 125
Lead	<0.00017		0.500	0.543		mg/L		109	75 - 125
Lithium	0.026		0.500	0.545		mg/L		104	75 - 125

**Lab Sample ID: 680-219187-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: MGWC-12**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408906**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.0015	J	0.250	0.213		mg/L		85	75 - 125	5	20
Arsenic	0.0015		1.00	1.02		mg/L		101	75 - 125	4	20
Boron	0.071	J	1.25	1.23		mg/L		92	75 - 125	1	20
Chromium	<0.0015		0.500	0.504		mg/L		101	75 - 125	4	20
Lead	<0.00017		0.500	0.519		mg/L		104	75 - 125	4	20

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: 680-219187-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: MGWC-12**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408906**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lithium	0.026		0.500	0.527		mg/L		100	75 - 125	4	20

**Lab Sample ID: MB 180-408917/1-A**  
**Matrix: Water**  
**Analysis Batch: 409293**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408917**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		08/16/22 16:48	08/18/22 18:32	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/16/22 16:48	08/18/22 18:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/16/22 16:48	08/18/22 18:32	1
Lead	<0.00017		0.0010	0.00017	mg/L		08/16/22 16:48	08/18/22 18:32	1

**Lab Sample ID: MB 180-408917/1-A**  
**Matrix: Water**  
**Analysis Batch: 409430**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408917**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		08/16/22 16:48	08/19/22 12:21	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/16/22 16:48	08/19/22 12:21	1

**Lab Sample ID: LCS 180-408917/2-A**  
**Matrix: Water**  
**Analysis Batch: 409293**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408917**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.250	0.238		mg/L		95	80 - 120
Arsenic	1.00	1.12		mg/L		112	80 - 120
Chromium	0.500	0.486		mg/L		97	80 - 120
Lead	0.500	0.536		mg/L		107	80 - 120

**Lab Sample ID: LCS 180-408917/2-A**  
**Matrix: Water**  
**Analysis Batch: 409430**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 408917**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.250	0.232		mg/L		93	80 - 120
Arsenic	1.00	0.949		mg/L		95	80 - 120
Boron	1.25	1.23	^+	mg/L		99	80 - 120
Chromium	0.500	0.522		mg/L		104	80 - 120
Lead	0.500	0.542		mg/L		108	80 - 120
Lithium	0.500	0.521		mg/L		104	80 - 120

**Lab Sample ID: MB 180-409372/1-A**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.000729	J	0.0020	0.00051	mg/L		08/19/22 12:45	08/20/22 11:55	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		08/19/22 12:45	08/20/22 11:55	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/19/22 12:45	08/20/22 11:55	1

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: MB 180-409372/1-A**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00017		0.0010	0.00017	mg/L		08/19/22 12:45	08/20/22 11:55	1
Lithium	<0.00083		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 11:55	1

**Lab Sample ID: MB 180-409372/1-A**  
**Matrix: Water**  
**Analysis Batch: 410047**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		08/19/22 12:45	08/23/22 12:51	1

**Lab Sample ID: LCS 180-409372/2-A**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.250	0.269		mg/L		108	80 - 120
Arsenic	1.00	1.01		mg/L		101	80 - 120
Boron	1.25	1.23	^+	mg/L		99	80 - 120
Chromium	0.500	0.498		mg/L		100	80 - 120
Lead	0.500	0.517		mg/L		103	80 - 120
Lithium	0.500	0.507		mg/L		101	80 - 120

**Lab Sample ID: LCS 180-409372/2-A**  
**Matrix: Water**  
**Analysis Batch: 410047**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.25	1.31		mg/L		105	80 - 120

**Lab Sample ID: 180-142545-J-1-B MS**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0013	J B	0.250	0.271		mg/L		108	75 - 125
Arsenic	0.0051		1.00	1.19		mg/L		118	75 - 125
Chromium	<0.0015		0.500	0.454		mg/L		91	75 - 125
Lead	0.00027	J	0.500	0.521		mg/L		104	75 - 125
Lithium	0.039		0.500	0.502		mg/L		93	75 - 125

**Lab Sample ID: 180-142545-J-1-C MSD**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	0.0013	J B	0.250	0.274		mg/L		109	75 - 125	1	20
Arsenic	0.0051		1.00	1.22		mg/L		122	75 - 125	3	20
Chromium	<0.0015		0.500	0.465		mg/L		93	75 - 125	2	20
Lead	0.00027	J	0.500	0.529		mg/L		106	75 - 125	1	20
Lithium	0.039		0.500	0.511		mg/L		94	75 - 125	2	20

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-415671/1-A**  
**Matrix: Water**  
**Analysis Batch: 415858**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 415671**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		10/20/22 11:45	10/21/22 10:49	1

**Lab Sample ID: LCS 180-415671/2-A**  
**Matrix: Water**  
**Analysis Batch: 415858**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 415671**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.25	1.17		mg/L		94	80 - 120

**Lab Sample ID: 680-219323-8 MS**  
**Matrix: Water**  
**Analysis Batch: 415858**

**Client Sample ID: EB-04**  
**Prep Type: Total Recoverable**  
**Prep Batch: 415671**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	<0.060		1.25	1.20		mg/L		96	75 - 125

**Lab Sample ID: 680-219323-8 MSD**  
**Matrix: Water**  
**Analysis Batch: 415858**

**Client Sample ID: EB-04**  
**Prep Type: Total Recoverable**  
**Prep Batch: 415671**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	<0.060		1.25	1.23		mg/L		99	75 - 125	3	20

**Lab Sample ID: 180-142337-C-7-B MS**  
**Matrix: Water**  
**Analysis Batch: 409293**

**Client Sample ID: Matrix Spike**  
**Prep Type: Dissolved**  
**Prep Batch: 408917**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00051		0.250	0.239		mg/L		96	75 - 125
Arsenic	0.013		1.00	1.11		mg/L		109	75 - 125
Chromium	<0.0015		0.500	0.497		mg/L		99	75 - 125
Lead	<0.00017		0.500	0.539		mg/L		108	75 - 125

**Lab Sample ID: 180-142337-C-7-B MS**  
**Matrix: Water**  
**Analysis Batch: 409430**

**Client Sample ID: Matrix Spike**  
**Prep Type: Dissolved**  
**Prep Batch: 408917**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.077	J	1.25	1.31		mg/L		98	75 - 125
Lithium	0.0019	J	0.500	0.526		mg/L		105	75 - 125

**Lab Sample ID: 180-142337-C-7-C MSD**  
**Matrix: Water**  
**Analysis Batch: 409293**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Dissolved**  
**Prep Batch: 408917**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00051		0.250	0.223		mg/L		89	75 - 125	7	20
Arsenic	0.013		1.00	1.04		mg/L		102	75 - 125	7	20
Chromium	<0.0015		0.500	0.466		mg/L		93	75 - 125	6	20
Lead	<0.00017		0.500	0.508		mg/L		102	75 - 125	6	20

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: 180-142337-C-7-C MSD**  
**Matrix: Water**  
**Analysis Batch: 409430**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Dissolved**  
**Prep Batch: 408917**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.077	J	1.25	1.29		mg/L		97	75 - 125	1	20
Lithium	0.0019	J	0.500	0.497		mg/L		99	75 - 125	6	20

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C)

**Lab Sample ID: MB 680-734098/1**  
**Matrix: Water**  
**Analysis Batch: 734098**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/04/22 10:35	1

**Lab Sample ID: LCS 680-734098/2**  
**Matrix: Water**  
**Analysis Batch: 734098**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	2440	2500		mg/L		102	80 - 120

**Lab Sample ID: LCSD 680-734098/3**  
**Matrix: Water**  
**Analysis Batch: 734098**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	2440	2500		mg/L		102	80 - 120	0	25

**Lab Sample ID: 680-219187-9 DU**  
**Matrix: Water**  
**Analysis Batch: 734098**

**Client Sample ID: FD-01**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	140		144		mg/L		NC	5

**Lab Sample ID: MB 680-734678/1**  
**Matrix: Water**  
**Analysis Batch: 734678**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/08/22 09:37	1

**Lab Sample ID: LCS 680-734678/2**  
**Matrix: Water**  
**Analysis Batch: 734678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	2420	2480		mg/L		102	80 - 120

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C) (Continued)

**Lab Sample ID: LCSD 680-734678/3**  
**Matrix: Water**  
**Analysis Batch: 734678**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	2420	2440		mg/L	-	101	80 - 120	2	25

**Lab Sample ID: 680-219305-C-1 DU**  
**Matrix: Water**  
**Analysis Batch: 734678**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	260		266		mg/L	-	2	5

**Lab Sample ID: 680-219323-7 DU**  
**Matrix: Water**  
**Analysis Batch: 734678**

**Client Sample ID: MGWC-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	400		388		mg/L	-	2	5

**Lab Sample ID: MB 680-734912/1**  
**Matrix: Water**  
**Analysis Batch: 734912**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L	-		08/09/22 10:35	1

**Lab Sample ID: LCS 680-734912/2**  
**Matrix: Water**  
**Analysis Batch: 734912**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	2420	2400		mg/L	-	99	80 - 120

**Lab Sample ID: LCSD 680-734912/3**  
**Matrix: Water**  
**Analysis Batch: 734912**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	2420	2400		mg/L	-	99	80 - 120	0	25

**Lab Sample ID: 680-219323-1 DU**  
**Matrix: Water**  
**Analysis Batch: 734912**

**Client Sample ID: FD-02**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	470		472		mg/L	-	1	5

**Lab Sample ID: 680-219323-4 DU**  
**Matrix: Water**  
**Analysis Batch: 734912**

**Client Sample ID: MGWC-8**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	620		602		mg/L	-	2	5

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C)

**Lab Sample ID: MB 680-744106/1**  
**Matrix: Water**  
**Analysis Batch: 744106**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			10/07/22 11:58	1

**Lab Sample ID: LCS 680-744106/2**  
**Matrix: Water**  
**Analysis Batch: 744106**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	2420	2480		mg/L		103	80 - 120

**Lab Sample ID: LCSD 680-744106/3**  
**Matrix: Water**  
**Analysis Batch: 744106**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	2420	2400		mg/L		99	80 - 120	3	25

**Lab Sample ID: 680-219187-3 DU**  
**Matrix: Water**  
**Analysis Batch: 744106**

**Client Sample ID: EB-03**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	150	H	158		mg/L		4	5



# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## HPLC/IC

### Analysis Batch: 735701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total/NA	Water	300.0-1993 R2.1	
680-219187-2	MGWA-11	Total/NA	Water	300.0-1993 R2.1	
680-219187-4	MGWA-5	Total/NA	Water	300.0-1993 R2.1	
680-219187-7	MGWC-12	Total/NA	Water	300.0-1993 R2.1	
680-219187-8	FB-01	Total/NA	Water	300.0-1993 R2.1	
680-219187-9	FD-01	Total/NA	Water	300.0-1993 R2.1	
MB 680-735701/11	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-735701/12	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-735701/13	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-219187-1 MS	MGWA-10	Total/NA	Water	300.0-1993 R2.1	
680-219187-1 MSD	MGWA-10	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 736072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-736072/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-736072/3	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-736072/4	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
160-46291-D-1 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
160-46291-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 736073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total/NA	Water	300.0-1993 R2.1	
MB 680-736073/34	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-736073/35	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-736073/36	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
660-122451-G-1 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
660-122451-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 736293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-2	FB-02	Total/NA	Water	300.0-1993 R2.1	
680-219323-3	MGWC-1	Total/NA	Water	300.0-1993 R2.1	
680-219323-4	MGWC-8	Total/NA	Water	300.0-1993 R2.1	
680-219323-5	MGWC-2	Total/NA	Water	300.0-1993 R2.1	
680-219323-6	MGWC-3	Total/NA	Water	300.0-1993 R2.1	
680-219323-7	MGWC-7	Total/NA	Water	300.0-1993 R2.1	
680-219323-8	EB-04	Total/NA	Water	300.0-1993 R2.1	
MB 680-736293/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-736293/3	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-736293/4	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
660-122486-S-2 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
660-122486-S-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 736485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-4 - DL	MGWC-8	Total/NA	Water	300.0-1993 R2.1	
MB 680-736485/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-736485/3	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-736485/4	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-218944-G-1 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## HPLC/IC (Continued)

### Analysis Batch: 736485 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-218944-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 740506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-3	EB-03	Total/NA	Water	300.0-1993 R2.1	
MB 680-740506/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-740506/3	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-740506/4	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
660-123636-I-1 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
660-123636-I-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 744497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-5	MGWA-6	Total/NA	Water	300.0-1993 R2.1	
680-219187-6	MGWA-6A	Total/NA	Water	300.0-1993 R2.1	
MB 680-744497/32	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-744497/33	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-744497/34	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-221593-E-22 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-221593-E-22 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

## Metals

### Prep Batch: 408906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-7	MGWC-12	Total Recoverable	Water	3005A	
680-219187-8	FB-01	Total Recoverable	Water	3005A	
MB 180-408906/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-408906/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-219187-7 MS	MGWC-12	Total Recoverable	Water	3005A	
680-219187-7 MSD	MGWC-12	Total Recoverable	Water	3005A	

### Prep Batch: 408917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total Recoverable	Water	3005A	
680-219187-2	MGWA-11	Total Recoverable	Water	3005A	
680-219187-3	EB-03	Total Recoverable	Water	3005A	
680-219187-4	MGWA-5	Total Recoverable	Water	3005A	
680-219187-5	MGWA-6	Total Recoverable	Water	3005A	
680-219187-6	MGWA-6A	Total Recoverable	Water	3005A	
680-219187-9	FD-01	Total Recoverable	Water	3005A	
MB 180-408917/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-408917/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-142337-C-7-B MS	Matrix Spike	Dissolved	Water	3005A	
180-142337-C-7-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

### Analysis Batch: 409293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total Recoverable	Water	EPA 6020B	408917
680-219187-2	MGWA-11	Total Recoverable	Water	EPA 6020B	408917
680-219187-3	EB-03	Total Recoverable	Water	EPA 6020B	408917

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Metals (Continued)

### Analysis Batch: 409293 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-4	MGWA-5	Total Recoverable	Water	EPA 6020B	408917
680-219187-5	MGWA-6	Total Recoverable	Water	EPA 6020B	408917
680-219187-6	MGWA-6A	Total Recoverable	Water	EPA 6020B	408917
680-219187-9	FD-01	Total Recoverable	Water	EPA 6020B	408917
MB 180-408917/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	408917
LCS 180-408917/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	408917
180-142337-C-7-B MS	Matrix Spike	Dissolved	Water	EPA 6020B	408917
180-142337-C-7-C MSD	Matrix Spike Duplicate	Dissolved	Water	EPA 6020B	408917

### Prep Batch: 409372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total Recoverable	Water	3005A	
680-219323-2	FB-02	Total Recoverable	Water	3005A	
680-219323-3	MGWC-1	Total Recoverable	Water	3005A	
680-219323-4	MGWC-8	Total Recoverable	Water	3005A	
680-219323-5	MGWC-2	Total Recoverable	Water	3005A	
680-219323-6	MGWC-3	Total Recoverable	Water	3005A	
680-219323-7	MGWC-7	Total Recoverable	Water	3005A	
680-219323-8	EB-04	Total Recoverable	Water	3005A	
MB 180-409372/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-409372/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-142545-J-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
180-142545-J-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Analysis Batch: 409430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total Recoverable	Water	EPA 6020B	408917
680-219187-2	MGWA-11	Total Recoverable	Water	EPA 6020B	408917
680-219187-3	EB-03	Total Recoverable	Water	EPA 6020B	408917
680-219187-4	MGWA-5	Total Recoverable	Water	EPA 6020B	408917
680-219187-5	MGWA-6	Total Recoverable	Water	EPA 6020B	408917
680-219187-6	MGWA-6A	Total Recoverable	Water	EPA 6020B	408917
680-219187-9	FD-01	Total Recoverable	Water	EPA 6020B	408917
MB 180-408917/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	408917
LCS 180-408917/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	408917
180-142337-C-7-B MS	Matrix Spike	Dissolved	Water	EPA 6020B	408917
180-142337-C-7-C MSD	Matrix Spike Duplicate	Dissolved	Water	EPA 6020B	408917

### Analysis Batch: 409603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-7	MGWC-12	Total Recoverable	Water	EPA 6020B	408906
680-219187-8	FB-01	Total Recoverable	Water	EPA 6020B	408906
680-219323-1	FD-02	Total Recoverable	Water	EPA 6020B	409372
680-219323-2	FB-02	Total Recoverable	Water	EPA 6020B	409372
680-219323-3	MGWC-1	Total Recoverable	Water	EPA 6020B	409372
680-219323-4	MGWC-8	Total Recoverable	Water	EPA 6020B	409372
680-219323-5	MGWC-2	Total Recoverable	Water	EPA 6020B	409372
680-219323-6	MGWC-3	Total Recoverable	Water	EPA 6020B	409372
680-219323-7	MGWC-7	Total Recoverable	Water	EPA 6020B	409372
680-219323-8	EB-04	Total Recoverable	Water	EPA 6020B	409372
MB 180-408906/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	408906

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Metals (Continued)

### Analysis Batch: 409603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-409372/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	409372
LCS 180-408906/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	408906
LCS 180-409372/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	409372
180-142545-J-1-B MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	409372
180-142545-J-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	409372
680-219187-7 MS	MGWC-12	Total Recoverable	Water	EPA 6020B	408906
680-219187-7 MSD	MGWC-12	Total Recoverable	Water	EPA 6020B	408906

### Analysis Batch: 410047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-409372/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	409372
LCS 180-409372/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	409372

### Analysis Batch: 410429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total Recoverable	Water	EPA 6020B	408917
680-219323-1	FD-02	Total Recoverable	Water	EPA 6020B	409372
680-219323-3	MGWC-1	Total Recoverable	Water	EPA 6020B	409372
680-219323-4	MGWC-8	Total Recoverable	Water	EPA 6020B	409372
680-219323-5	MGWC-2	Total Recoverable	Water	EPA 6020B	409372
680-219323-6	MGWC-3	Total Recoverable	Water	EPA 6020B	409372
680-219323-7	MGWC-7	Total Recoverable	Water	EPA 6020B	409372

### Prep Batch: 415671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-2	FB-02	Total Recoverable	Water	3005A	
680-219323-8	EB-04	Total Recoverable	Water	3005A	
MB 180-415671/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-415671/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-219323-8 MS	EB-04	Total Recoverable	Water	3005A	
680-219323-8 MSD	EB-04	Total Recoverable	Water	3005A	

### Analysis Batch: 415858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-2	FB-02	Total Recoverable	Water	EPA 6020B	415671
680-219323-8	EB-04	Total Recoverable	Water	EPA 6020B	415671
MB 180-415671/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	415671
LCS 180-415671/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	415671
680-219323-8 MS	EB-04	Total Recoverable	Water	EPA 6020B	415671
680-219323-8 MSD	EB-04	Total Recoverable	Water	EPA 6020B	415671

### Prep Batch: 734013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total Recoverable	Water	3005A	
680-219187-2	MGWA-11	Total Recoverable	Water	3005A	
MB 680-734013/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-734013/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-219140-B-4-B MS	Matrix Spike	Total Recoverable	Water	3005A	
680-219140-B-4-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Metals

### Prep Batch: 734147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total/NA	Water	7470A	
680-219187-2	MGWA-11	Total/NA	Water	7470A	
680-219187-3	EB-03	Total/NA	Water	7470A	
680-219187-4	MGWA-5	Total/NA	Water	7470A	
680-219187-5	MGWA-6	Total/NA	Water	7470A	
680-219187-6	MGWA-6A	Total/NA	Water	7470A	
680-219187-7	MGWC-12	Total/NA	Water	7470A	
680-219187-8	FB-01	Total/NA	Water	7470A	
680-219187-9	FD-01	Total/NA	Water	7470A	
MB 680-734147/12-A	Method Blank	Total/NA	Water	7470A	
LCS 680-734147/13-A	Lab Control Sample	Total/NA	Water	7470A	
680-219187-1 MS	MGWA-10	Total/NA	Water	7470A	
680-219187-1 MSD	MGWA-10	Total/NA	Water	7470A	

### Prep Batch: 734603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-7	MGWC-7	Total Recoverable	Water	3005A	
680-219323-8	EB-04	Total Recoverable	Water	3005A	
MB 680-734603/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-734603/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
660-122511-A-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-122511-A-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Prep Batch: 734604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total Recoverable	Water	3005A	
680-219323-2	FB-02	Total Recoverable	Water	3005A	
680-219323-3	MGWC-1	Total Recoverable	Water	3005A	
680-219323-4	MGWC-8	Total Recoverable	Water	3005A	
680-219323-5	MGWC-2	Total Recoverable	Water	3005A	
680-219323-6	MGWC-3	Total Recoverable	Water	3005A	
MB 680-734604/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-734604/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
410-93040-G-1-E MS	Matrix Spike	Dissolved	Water	3005A	
410-93040-G-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
410-93040-A-1-B DU	Duplicate	Dissolved	Water	3005A	

### Analysis Batch: 734763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-7	MGWC-7	Total Recoverable	Water	6020B	734603
680-219323-8	EB-04	Total Recoverable	Water	6020B	734603
MB 680-734603/1-A	Method Blank	Total Recoverable	Water	6020B	734603
LCS 680-734603/2-A	Lab Control Sample	Total Recoverable	Water	6020B	734603
660-122511-A-2-B MS	Matrix Spike	Total Recoverable	Water	6020B	734603
660-122511-A-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	734603

### Analysis Batch: 734769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total/NA	Water	7470A	734147
680-219187-2	MGWA-11	Total/NA	Water	7470A	734147
680-219187-3	EB-03	Total/NA	Water	7470A	734147

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Metals (Continued)

### Analysis Batch: 734769 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-4	MGWA-5	Total/NA	Water	7470A	734147
680-219187-5	MGWA-6	Total/NA	Water	7470A	734147
680-219187-6	MGWA-6A	Total/NA	Water	7470A	734147
680-219187-7	MGWC-12	Total/NA	Water	7470A	734147
680-219187-8	FB-01	Total/NA	Water	7470A	734147
680-219187-9	FD-01	Total/NA	Water	7470A	734147
MB 680-734147/12-A	Method Blank	Total/NA	Water	7470A	734147
LCS 680-734147/13-A	Lab Control Sample	Total/NA	Water	7470A	734147
680-219187-1 MS	MGWA-10	Total/NA	Water	7470A	734147
680-219187-1 MSD	MGWA-10	Total/NA	Water	7470A	734147

### Analysis Batch: 734891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total Recoverable	Water	6020B	734604
680-219323-2	FB-02	Total Recoverable	Water	6020B	734604
680-219323-3	MGWC-1	Total Recoverable	Water	6020B	734604
680-219323-4	MGWC-8	Total Recoverable	Water	6020B	734604
680-219323-5	MGWC-2	Total Recoverable	Water	6020B	734604
680-219323-6	MGWC-3	Total Recoverable	Water	6020B	734604
MB 680-734604/1-A	Method Blank	Total Recoverable	Water	6020B	734604
LCS 680-734604/2-A	Lab Control Sample	Total Recoverable	Water	6020B	734604
410-93040-G-1-E MS	Matrix Spike	Dissolved	Water	6020B	734604
410-93040-G-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020B	734604
410-93040-A-1-B DU	Duplicate	Dissolved	Water	6020B	734604

### Prep Batch: 735012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total/NA	Water	7470A	
680-219323-2	FB-02	Total/NA	Water	7470A	
680-219323-3	MGWC-1	Total/NA	Water	7470A	
680-219323-4	MGWC-8	Total/NA	Water	7470A	
680-219323-5	MGWC-2	Total/NA	Water	7470A	
680-219323-6	MGWC-3	Total/NA	Water	7470A	
680-219323-7	MGWC-7	Total/NA	Water	7470A	
MB 680-735012/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-735012/2-A	Lab Control Sample	Total/NA	Water	7470A	
660-122564-B-5-E MS	Matrix Spike	Total/NA	Water	7470A	
660-122564-B-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

### Analysis Batch: 735232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total/NA	Water	7470A	735012
680-219323-2	FB-02	Total/NA	Water	7470A	735012
680-219323-3	MGWC-1	Total/NA	Water	7470A	735012
680-219323-4	MGWC-8	Total/NA	Water	7470A	735012
680-219323-5	MGWC-2	Total/NA	Water	7470A	735012
680-219323-6	MGWC-3	Total/NA	Water	7470A	735012
680-219323-7	MGWC-7	Total/NA	Water	7470A	735012
MB 680-735012/1-A	Method Blank	Total/NA	Water	7470A	735012
LCS 680-735012/2-A	Lab Control Sample	Total/NA	Water	7470A	735012
660-122564-B-5-E MS	Matrix Spike	Total/NA	Water	7470A	735012

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Metals (Continued)

### Analysis Batch: 735232 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-122564-B-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	735012

### Prep Batch: 735626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-8	EB-04	Total/NA	Water	7470A	
MB 680-735626/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-735626/2-A	Lab Control Sample	Total/NA	Water	7470A	
660-122723-B-2-D MS	Matrix Spike	Total/NA	Water	7470A	
660-122723-B-2-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

### Analysis Batch: 735903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-8	EB-04	Total/NA	Water	7470A	735626
MB 680-735626/1-A	Method Blank	Total/NA	Water	7470A	735626
LCS 680-735626/2-A	Lab Control Sample	Total/NA	Water	7470A	735626
660-122723-B-2-D MS	Matrix Spike	Total/NA	Water	7470A	735626
660-122723-B-2-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	735626

### Analysis Batch: 735910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total Recoverable	Water	6020B	734013
680-219187-2	MGWA-11	Total Recoverable	Water	6020B	734013
MB 680-734013/1-A	Method Blank	Total Recoverable	Water	6020B	734013
LCS 680-734013/2-A	Lab Control Sample	Total Recoverable	Water	6020B	734013
680-219140-B-4-B MS	Matrix Spike	Total Recoverable	Water	6020B	734013
680-219140-B-4-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	734013

### Prep Batch: 740331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-3	EB-03	Total Recoverable	Water	3005A	
680-219187-4	MGWA-5	Total Recoverable	Water	3005A	
680-219187-5	MGWA-6	Total Recoverable	Water	3005A	
680-219187-6	MGWA-6A	Total Recoverable	Water	3005A	
680-219187-7	MGWC-12	Total Recoverable	Water	3005A	
680-219187-8	FB-01	Total Recoverable	Water	3005A	
680-219187-9	FD-01	Total Recoverable	Water	3005A	
MB 680-740331/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-740331/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-220983-B-1-E MS	Matrix Spike	Total Recoverable	Water	3005A	
680-220983-B-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Analysis Batch: 740573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-3	EB-03	Total Recoverable	Water	6020B	740331
680-219187-4	MGWA-5	Total Recoverable	Water	6020B	740331
680-219187-5	MGWA-6	Total Recoverable	Water	6020B	740331
680-219187-6	MGWA-6A	Total Recoverable	Water	6020B	740331
680-219187-7	MGWC-12	Total Recoverable	Water	6020B	740331
680-219187-8	FB-01	Total Recoverable	Water	6020B	740331
680-219187-9	FD-01	Total Recoverable	Water	6020B	740331
MB 680-740331/1-A	Method Blank	Total Recoverable	Water	6020B	740331

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Metals (Continued)

### Analysis Batch: 740573 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-740331/2-A	Lab Control Sample	Total Recoverable	Water	6020B	740331
680-220983-B-1-E MS	Matrix Spike	Total Recoverable	Water	6020B	740331
680-220983-B-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	740331

## General Chemistry

### Analysis Batch: 734098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total/NA	Water	2540C-2011	
680-219187-2	MGWA-11	Total/NA	Water	2540C-2011	
680-219187-3	EB-03	Total/NA	Water	2540C-2011	
680-219187-4	MGWA-5	Total/NA	Water	2540C-2011	
680-219187-5	MGWA-6	Total/NA	Water	2540C-2011	
680-219187-6	MGWA-6A	Total/NA	Water	2540C-2011	
680-219187-7	MGWC-12	Total/NA	Water	2540C-2011	
680-219187-8	FB-01	Total/NA	Water	2540C-2011	
680-219187-9	FD-01	Total/NA	Water	2540C-2011	
MB 680-734098/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-734098/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-734098/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-219187-9 DU	FD-01	Total/NA	Water	2540C-2011	

### Analysis Batch: 734678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-2	FB-02	Total/NA	Water	2540C-2011	
680-219323-3	MGWC-1	Total/NA	Water	2540C-2011	
680-219323-6	MGWC-3	Total/NA	Water	2540C-2011	
680-219323-7	MGWC-7	Total/NA	Water	2540C-2011	
MB 680-734678/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-734678/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-734678/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-219305-C-1 DU	Duplicate	Total/NA	Water	2540C-2011	
680-219323-7 DU	MGWC-7	Total/NA	Water	2540C-2011	

### Analysis Batch: 734912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total/NA	Water	2540C-2011	
680-219323-4	MGWC-8	Total/NA	Water	2540C-2011	
680-219323-5	MGWC-2	Total/NA	Water	2540C-2011	
680-219323-8	EB-04	Total/NA	Water	2540C-2011	
MB 680-734912/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-734912/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-734912/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-219323-1 DU	FD-02	Total/NA	Water	2540C-2011	
680-219323-4 DU	MGWC-8	Total/NA	Water	2540C-2011	

### Analysis Batch: 744106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-3	EB-03	Total/NA	Water	2540C-2011	
680-219187-6	MGWA-6A	Total/NA	Water	2540C-2011	
MB 680-744106/1	Method Blank	Total/NA	Water	2540C-2011	

Eurofins Savannah



# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## General Chemistry (Continued)

### Analysis Batch: 744106 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-744106/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-744106/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-219187-3 DU	EB-03	Total/NA	Water	2540C-2011	

## Field Service / Mobile Lab

### Analysis Batch: 734010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total/NA	Water	Field Sampling	
680-219187-2	MGWA-11	Total/NA	Water	Field Sampling	
680-219187-4	MGWA-5	Total/NA	Water	Field Sampling	
680-219187-5	MGWA-6	Total/NA	Water	Field Sampling	
680-219187-6	MGWA-6A	Total/NA	Water	Field Sampling	
680-219187-7	MGWC-12	Total/NA	Water	Field Sampling	

### Analysis Batch: 734816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-3	MGWC-1	Total/NA	Water	Field Sampling	
680-219323-4	MGWC-8	Total/NA	Water	Field Sampling	
680-219323-5	MGWC-2	Total/NA	Water	Field Sampling	
680-219323-6	MGWC-3	Total/NA	Water	Field Sampling	
680-219323-7	MGWC-7	Total/NA	Water	Field Sampling	

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWA-10**

**Lab Sample ID: 680-219187-1**

**Date Collected: 08/02/22 11:20**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	735701	08/13/22 15:32	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	734013	08/04/22 05:44	RR	EET SAV
Total Recoverable	Analysis	6020B		1			735910	08/04/22 22:34	BCB	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:19	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409293	08/18/22 20:06	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409430	08/19/22 13:34	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 12:19	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734010	08/02/22 11:20	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWA-11**

**Lab Sample ID: 680-219187-2**

**Date Collected: 08/02/22 14:05**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	735701	08/13/22 16:10	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	734013	08/04/22 05:44	RR	EET SAV
Total Recoverable	Analysis	6020B		1			735910	08/04/22 22:42	BCB	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:30	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409293	08/18/22 20:09	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409430	08/19/22 13:44	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734010	08/02/22 14:05	T1C	EET SAV
Instrument ID: NOEQUIP										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: EB-03**

**Lab Sample ID: 680-219187-3**

**Date Collected: 08/02/22 13:50**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	740506	09/15/22 12:36	AF	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	740331	09/14/22 12:54	RR	EET SAV
Total Recoverable	Analysis	6020B		1			740573	09/15/22 12:12	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:33	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409293	08/18/22 19:10	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409430	08/19/22 12:31	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	744106	10/07/22 11:58	PG	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWA-5**

**Lab Sample ID: 680-219187-4**

**Date Collected: 08/02/22 15:50**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	735701	08/13/22 16:48	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	740331	09/14/22 12:54	RR	EET SAV
Total Recoverable	Analysis	6020B		1			740573	09/15/22 12:16	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:36	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409293	08/18/22 20:13	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409430	08/19/22 13:48	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734010	08/02/22 15:50	T1C	EET SAV
Instrument ID: NOEQUIP										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWA-6**

**Lab Sample ID: 680-219187-5**

**Date Collected: 08/02/22 12:55**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	744497	10/11/22 00:08	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	740331	09/14/22 12:54	RR	EET SAV
Total Recoverable	Analysis	6020B		1			740573	09/15/22 12:40	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:40	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409293	08/18/22 20:23	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409430	08/19/22 13:51	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734010	08/02/22 12:55	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWA-6A**

**Lab Sample ID: 680-219187-6**

**Date Collected: 08/02/22 14:20**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	744497	10/11/22 00:21	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	740331	09/14/22 12:54	RR	EET SAV
Total Recoverable	Analysis	6020B		1			740573	09/15/22 12:32	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:43	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409293	08/18/22 20:27	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409430	08/19/22 13:55	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	744106	10/07/22 11:58	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734010	08/02/22 14:20	T1C	EET SAV
Instrument ID: NOEQUIP										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWC-12**

**Lab Sample ID: 680-219187-7**

**Date Collected: 08/02/22 16:05**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	735701	08/13/22 17:26	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	740331	09/14/22 12:54	RR	EET SAV
Total Recoverable	Analysis	6020B		1			740573	09/15/22 12:43	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:53	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408906	08/16/22 15:42	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 15:04	RSK	EET PIT
Instrument ID: A										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734010	08/02/22 16:05	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: FB-01**

**Lab Sample ID: 680-219187-8**

**Date Collected: 08/02/22 13:10**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	735701	08/13/22 17:38	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	740331	09/14/22 12:54	RR	EET SAV
Total Recoverable	Analysis	6020B		1			740573	09/15/22 12:28	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 13:57	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408906	08/16/22 15:42	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 15:22	RSK	EET PIT
Instrument ID: A										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: FD-01**

**Lab Sample ID: 680-219187-9**

**Date Collected: 08/02/22 00:00**

**Matrix: Water**

**Date Received: 08/03/22 11:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	735701	08/13/22 16:23	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	740331	09/14/22 12:54	RR	EET SAV
Total Recoverable	Analysis	6020B		1			740573	09/15/22 12:36	BWR	EET SAV
Instrument ID: ICPMSC										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: FD-01**  
**Date Collected: 08/02/22 00:00**  
**Date Received: 08/03/22 11:00**

**Lab Sample ID: 680-219187-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	734147	08/04/22 13:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			734769	08/05/22 14:00	JKL	EET SAV
Instrument ID: LEEMAN2										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409293	08/18/22 19:07	RSK	EET PIT
Instrument ID: DORY										
Total Recoverable	Prep	3005A			25 mL	25 mL	408917	08/16/22 16:48	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409430	08/19/22 12:28	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734098	08/04/22 10:35	AS	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: FD-02**  
**Date Collected: 08/04/22 00:00**  
**Date Received: 08/05/22 09:20**

**Lab Sample ID: 680-219323-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736073	08/16/22 21:51	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 19:59	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	735012	08/09/22 16:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			735232	08/10/22 11:39	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 13:33	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 10:13	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734912	08/09/22 10:35	PG	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: FB-02**  
**Date Collected: 08/03/22 11:00**  
**Date Received: 08/05/22 09:20**

**Lab Sample ID: 680-219323-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736293	08/17/22 16:04	UI	EET SAV
Instrument ID: CICH										
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 20:05	BWR	EET SAV
Instrument ID: ICPMSD										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: FB-02**

**Lab Sample ID: 680-219323-2**

Date Collected: 08/03/22 11:00

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	735012	08/09/22 16:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			735232	08/10/22 11:42	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 13:37	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	415671	10/20/22 11:45	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415858	10/21/22 10:56	RSK	EET PIT
Instrument ID: A										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	734678	08/08/22 09:37	AS	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-1**

**Lab Sample ID: 680-219323-3**

Date Collected: 08/03/22 11:25

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736293	08/17/22 16:16	UI	EET SAV
Instrument ID: CICH										
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 20:02	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	735012	08/09/22 16:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			735232	08/10/22 11:44	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 13:40	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 10:20	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734678	08/08/22 09:37	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734816	08/03/22 11:25	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-8**

**Lab Sample ID: 680-219323-4**

Date Collected: 08/04/22 10:26

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736293	08/17/22 16:29	UI	EET SAV
Instrument ID: CICH										
Total/NA	Analysis	300.0-1993 R2.1	DL	5	5 mL	5 mL	736485	08/18/22 12:35	UI	EET SAV
Instrument ID: CICH										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWC-8**

**Lab Sample ID: 680-219323-4**

**Date Collected: 08/04/22 10:26**

**Matrix: Water**

**Date Received: 08/05/22 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 20:12	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	735012	08/09/22 16:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			735232	08/10/22 11:47	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 13:44	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 10:24	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734912	08/09/22 10:35	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734816	08/04/22 10:26	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-2**

**Lab Sample ID: 680-219323-5**

**Date Collected: 08/04/22 10:00**

**Matrix: Water**

**Date Received: 08/05/22 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736293	08/17/22 16:42	UI	EET SAV
Instrument ID: CICH										
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 20:15	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	735012	08/09/22 16:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			735232	08/10/22 11:49	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 13:59	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 10:38	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734912	08/09/22 10:35	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734816	08/04/22 10:00	T1C	EET SAV
Instrument ID: NOEQUIP										



# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: MGWC-3**

**Lab Sample ID: 680-219323-6**

**Date Collected: 08/03/22 12:55**

**Matrix: Water**

**Date Received: 08/05/22 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736293	08/17/22 16:55	UI	EET SAV
Instrument ID: CICH										
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 20:17	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	735012	08/09/22 16:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			735232	08/10/22 11:52	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 14:02	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 10:55	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734678	08/08/22 09:37	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734816	08/03/22 12:55	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-7**

**Lab Sample ID: 680-219323-7**

**Date Collected: 08/03/22 11:20**

**Matrix: Water**

**Date Received: 08/05/22 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736293	08/17/22 17:08	UI	EET SAV
Instrument ID: CICH										
Total Recoverable	Prep	3005A			50 mL	250 mL	734603	08/08/22 05:43	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734763	08/08/22 12:50	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	735012	08/09/22 16:24	JKL	EET SAV
Total/NA	Analysis	7470A		1			735232	08/10/22 11:55	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 14:06	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 10:59	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	734678	08/08/22 09:37	AS	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			734816	08/03/22 11:20	T1C	EET SAV
Instrument ID: NOEQUIP										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

**Client Sample ID: EB-04**

**Lab Sample ID: 680-219323-8**

**Date Collected: 08/04/22 11:15**

**Matrix: Water**

**Date Received: 08/05/22 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	736293	08/17/22 17:21	UI	EET SAV
Instrument ID: CICH										
Total Recoverable	Prep	3005A			50 mL	250 mL	734603	08/08/22 05:43	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734763	08/08/22 12:47	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	735626	08/12/22 14:16	JKL	EET SAV
Total/NA	Analysis	7470A		1			735903	08/15/22 12:36	JKL	EET SAV
Instrument ID: QuickTrace2										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 14:09	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	415671	10/20/22 11:45	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415858	10/21/22 11:00	RSK	EET PIT
Instrument ID: A										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	734912	08/09/22 10:35	PG	EET SAV
Instrument ID: NOEQUIP										

**Laboratory References:**

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Accreditation/Certification Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

## Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87052	06-23-23
Georgia	State	E87052	06-30-23

## Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	PA 02-00416	04-30-23
Pennsylvania	NELAP	02-00416	04-30-23

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

# Method Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-1

Method	Method Description	Protocol	Laboratory
300.0-1993 R2.1	Anions, Ion Chromatography	MCAWW	EET SAV
6020B	Metals (ICP/MS)	SW846	EET SAV
7470A	Mercury (CVAA)	SW846	EET SAV
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
2540C-2011	Total Dissolved Solids (Dried at 180 °C)	SM	EET SAV
Field Sampling	Field Sampling	EPA	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

#### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

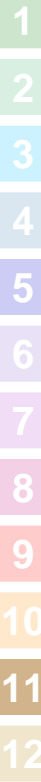
#### Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

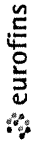
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Chain of Custody Record

<b>Client Information</b>		Sampler: <u>A. Schnitzler, J. Benford</u>		Lab PM: <u>Fuller, David</u>		Center Tracking No(s)		COC No:	
Company: <u>GA Power</u>		Phone: <u>720-594-5498</u>		E-Mail: <u>david.fuller@et.eurofins.com</u>		Page:		Job #:	
Address: <u>241 Ralph McGill Blvd SE</u>		City: <u>Atlanta</u>		State Zip: <u>GA, 30308</u>		Lab Project #: <u>68027747</u>		PO #:	
Phone: <u>404-506-7116(Tel)</u>		Email: <u>SCS Contacts / ACC Contacts</u>		Project Name: <u>Plant McIntosh - Ash Pond 1</u>		Site: <u>Georgia</u>		SSOW#:	
Due Date Requested		TAT Requested (days)		Field Filled Sample (Yes or No)		Perform MS/MSD (Yes or No)		App. III Metals (B, Ca)	
Matrix (W=ground water, WQ=quality control)		Sample Type (C=comp, G=grab)		Sample Time (hhmm)		Sample Date (mm/dd/yy)		Preservation Code:	
Sample Identification		M 6WA-10		G		WG		N	
M 6WA-11		G		WG		N		N	
EB-03		G		WG		N		N	
M 6WA-5		G		WG		N		N	
M 6WA-6		G		WG		N		N	
M 6WA-6A		G		WG		N		N	
M 6WC-1Z		G		WG		N		N	
FB-01		G		WG		N		N	
FD-01		G		WG		N		N	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
Deliverable Requested		I, II, III, IV		Other (specify)		Unknown		Radiological	
Empty Kit Relinquished by		Date		Time		Method of Shipment		Return To Client	
Relinquished by: <u>[Signature]</u>		Date: <u>8/3/22</u>		Time: <u>0905</u>		Company: <u>ACC</u>		Disposal By Lab	
Relinquished by: <u>[Signature]</u>		Date: <u>8/3/22</u>		Time: <u>11:05</u>		Company: <u>EPB</u>		Archive For	
Relinquished by: <u>[Signature]</u>		Date: <u>8/3/22</u>		Time: <u>11:05</u>		Company: <u>ACC</u>		Months	
Custody Seals Intact: <u>Δ Yes Δ No</u>		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <u>2.2 / 2-1</u>		Date/Time: <u>8/3/22 0905</u>		Company: <u>ACC</u>	



# Chain of Custody Record



Environment Testing  
 America

<b>Client Information</b> Client Contact: <i>A. Smith</i> SCS Contacts: <i>770-594-5990</i> Company: <i>Bechtel</i> Lab PM: <i>Fuller David</i> E-Mail: <i>david.fuller@eurofins.com</i>		Carrier Tracking No(s): COC No.: Page: Job #:																																																													
Due Date Requested: TAT Requested (days): Lab Project #: <i>68027747</i> PO #: <i>404-506-7116(Tel)</i> Email: <i>SCS Contacts / ACC Contacts</i> Project Name: <i>Plant McIntosh - Ash Pond 1</i> Site: <i>Georgia</i>		<b>Analysis Requested</b> <table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>App. III Metals (B, Ca)</th> <th>GI, F, SO<sub>4</sub>, TDS (EPA 300.0 &amp; SM 2540C)</th> <th>App. IV Metals (Sb, As, Ba, Be, Bi, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl)</th> <th>Radium 226 &amp; 228 (SW-846 9315/9320)</th> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	App. III Metals (B, Ca)	GI, F, SO <sub>4</sub> , TDS (EPA 300.0 & SM 2540C)	App. IV Metals (Sb, As, Ba, Be, Bi, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl)	Radium 226 & 228 (SW-846 9315/9320)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																																
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	App. III Metals (B, Ca)	GI, F, SO <sub>4</sub> , TDS (EPA 300.0 & SM 2540C)	App. IV Metals (Sb, As, Ba, Be, Bi, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl)	Radium 226 & 228 (SW-846 9315/9320)																																																										
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																																										
<b>Sample Identification</b> <table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date (mm/dd/yy)</th> <th>Sample Time (hh:mm)</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=ground water, WQ=quality control)</th> <th>Preservation Code:</th> </tr> </thead> <tbody> <tr> <td><i>FD-02</i></td> <td><i>08/04/22</i></td> <td><i>1100</i></td> <td><i>G</i></td> <td><i>WG</i></td> <td><i>D</i></td> </tr> <tr> <td><i>FB-02</i></td> <td><i>08/03/22</i></td> <td><i>1100</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> <tr> <td><i>M GwC-1</i></td> <td><i>08/03/22</i></td> <td><i>1125</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> <tr> <td><i>M GwC-8</i></td> <td><i>08/04/22</i></td> <td><i>1026</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> <tr> <td><i>M GwC-20</i></td> <td><i>08/04/22</i></td> <td><i>1335</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> <tr> <td><i>M GwC-2</i></td> <td><i>08/04/22</i></td> <td><i>1000</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> <tr> <td><i>M GwC-3</i></td> <td><i>08/03/22</i></td> <td><i>1255</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> <tr> <td><i>M GwC-7</i></td> <td><i>08/03/22</i></td> <td><i>1120</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> <tr> <td><i>EB-04</i></td> <td><i>08/04/22</i></td> <td><i>1115</i></td> <td><i>G</i></td> <td><i>WB</i></td> <td><i>D</i></td> </tr> </tbody> </table>		Sample Identification	Sample Date (mm/dd/yy)	Sample Time (hh:mm)	Sample Type (C=Comp, G=grab)	Matrix (W=ground water, WQ=quality control)	Preservation Code:	<i>FD-02</i>	<i>08/04/22</i>	<i>1100</i>	<i>G</i>	<i>WG</i>	<i>D</i>	<i>FB-02</i>	<i>08/03/22</i>	<i>1100</i>	<i>G</i>	<i>WB</i>	<i>D</i>	<i>M GwC-1</i>	<i>08/03/22</i>	<i>1125</i>	<i>G</i>	<i>WB</i>	<i>D</i>	<i>M GwC-8</i>	<i>08/04/22</i>	<i>1026</i>	<i>G</i>	<i>WB</i>	<i>D</i>	<i>M GwC-20</i>	<i>08/04/22</i>	<i>1335</i>	<i>G</i>	<i>WB</i>	<i>D</i>	<i>M GwC-2</i>	<i>08/04/22</i>	<i>1000</i>	<i>G</i>	<i>WB</i>	<i>D</i>	<i>M GwC-3</i>	<i>08/03/22</i>	<i>1255</i>	<i>G</i>	<i>WB</i>	<i>D</i>	<i>M GwC-7</i>	<i>08/03/22</i>	<i>1120</i>	<i>G</i>	<i>WB</i>	<i>D</i>	<i>EB-04</i>	<i>08/04/22</i>	<i>1115</i>	<i>G</i>	<i>WB</i>	<i>D</i>	Total Number of Containers: <i>6</i> pH: <i>N/A</i> pH: <i>N/A</i> pH: <i>7.23</i> pH: <i>6.50</i> pH: <i>7.37</i> pH: <i>6.91</i> pH: <i>6.86</i> pH: <i>N/A</i> pH: pH:	
Sample Identification	Sample Date (mm/dd/yy)	Sample Time (hh:mm)	Sample Type (C=Comp, G=grab)	Matrix (W=ground water, WQ=quality control)	Preservation Code:																																																										
<i>FD-02</i>	<i>08/04/22</i>	<i>1100</i>	<i>G</i>	<i>WG</i>	<i>D</i>																																																										
<i>FB-02</i>	<i>08/03/22</i>	<i>1100</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
<i>M GwC-1</i>	<i>08/03/22</i>	<i>1125</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
<i>M GwC-8</i>	<i>08/04/22</i>	<i>1026</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
<i>M GwC-20</i>	<i>08/04/22</i>	<i>1335</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
<i>M GwC-2</i>	<i>08/04/22</i>	<i>1000</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
<i>M GwC-3</i>	<i>08/03/22</i>	<i>1255</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
<i>M GwC-7</i>	<i>08/03/22</i>	<i>1120</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
<i>EB-04</i>	<i>08/04/22</i>	<i>1115</i>	<i>G</i>	<i>WB</i>	<i>D</i>																																																										
Address: <i>241 Ralph McGill Blvd SE</i> City: <i>Atlanta</i> State Zip: <i>GA, 30308</i> Phone: <i>404-506-7116(Tel)</i> Email: <i>SCS Contacts / ACC Contacts</i> Project Name: <i>Plant McIntosh - Ash Pond 1</i> Site: <i>Georgia</i>		Special Instructions/Note: <i>Full APP III and APP IV</i>																																																													
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																																													
<b>Empty Kit Relinquished by:</b> <i>Fuller David</i>		<b>Method of Shipment:</b> Date/Time: <i>8/4/22 1345</i> Company: <i>Acc</i> Date/Time: <i>8/5/22 915</i> Company: <i>Acc</i> Date/Time: <i>8/5/22 915</i> Company: <i>Acc</i>																																																													
Relinquished by: <i>Fuller David</i>		Relinquished by: <i>Fuller David</i>																																																													
Relinquished by: <i>Fuller David</i>		Relinquished by: <i>Fuller David</i>																																																													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: <i>1.3   1.8</i>																																																													



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

UNCORRECTED TEMP  
 THERMOMETER ID  
 Initials CF  
 PT-WI-SR-001 effective 11/8/18  
**XN AGCA**  
 TRK# 1328 9416 0870  
 15238  
 PA-US  
 P11  
**PRIORITY OVERNIGHT**  
**FRI - 05 AUG 10:30A**

**FedEx Express**  
**E**  
 3222022032801 v1  
 (412) 963-7068  
 PO: YES  
 REF: 5680-138153  
**PITTSBURGH PA 15238**  
**RIDC PARK**  
**301 ALPHA DRIVE**  
**SHIPPING/RECEIVING**  
**EUROFINS ENVIRONMENT TESTING NORTH**  
 TO  
 SAVANNAH, GA 31404  
 UNITED STATES US  
 SHIPPING/TESTAMERICA  
 8102 LA ROCHE AVE  
 ORIGIN ID: SAVA (912) 354-7858  
 SHIP DATE: 04AUG22  
 ACTWGT: 10.00 LB MAN  
 CAD: 0801261/CAFE3614  
 BILL SENDER

THE LEADER IN ENVIRONMENTAL TESTING  
**TestAmerica**

Do not  
 680-219187 Waybill  


- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

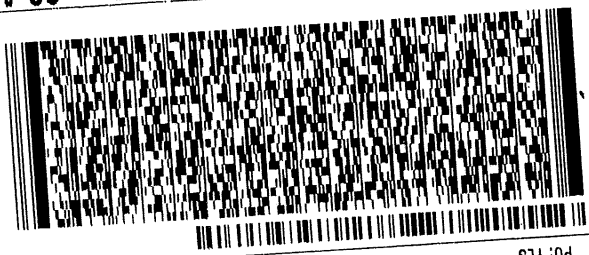
PT-WI-SR-001 effective 11/8/18  
 Uncorrected temp 3.3 °C  
 Thermometer ID 8  
 Initials CF-0.7

**XN AGCA**

15238  
 PA-US P1T

TUE - 09 AUG 10:30A  
 PRIORITY OVERNIGHT

TRK# 1328 9416 1400 0201



SHIPPING/RECEIVING  
 EUROFINS ENVIRONMENT TESTING NORTHE  
 301 ALPHA DRIVE  
 RIDG PARK  
 PITTSBURGH PA 15238  
 REF: S680-138195  
 (412) 963-7068  
 PO: YES

SHIP DATE: 08AUG22  
 ACTWGT: 5.00 LB MAN  
 CAD: 0801281/CFE3614  
 BILL SENDER  
 ORIGIN ID: SAVA (912) 354-7858  
 SHIPPING EUROFINS/TESTAMERICA  
 5102 LA ROCHE AVE  
 SAVANNAH, GA 31404  
 UNITED STATES US

**TestAmerica**  
 THE LEADER IN ENVIRONMENTAL TESTING

Part # 159469-434 MTW EXP 01/23



**Eurofins Savannah**  
 5102 LaRoche Avenue  
 Savannah, GA 31404  
 Phone 912-354-7858 Fax 912-352-0165

**Chain of Custody Record**

**urofins** | Environment Testing  
 America



<b>Client Information (Sub Contract Lab)</b>		Lab PM Fuller, David	Page 03586 1					
Shipping/Receiving		E-Mail David.Fuller@eurofins.us	Page 1 of 1					
Company Eurofins Environment Testing Northeast,		Address 301 Alpha Drive, RIDC Park,	Job # 680-219187-1					
City Pittsburgh		State Georgia	Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2SO4 Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)					
State, Zip PA, 15238		Due Date Requested: 8/16/2022	Analysis Requested					
Phone 412-963-7058(Tel) 412-963-2468(Fax)		TAT Requested (days):						
Email		PO #						
Project Name Plant McIntosh - Ash Pond 1		WO #						
Site 68027747		Project #						
Sample Identification - Client ID (Lab ID)		SSOW#						
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:
MGWA-10 (680-219187-1)	8/2/22	11 20 Eastern	Water	Water	X	X	1	
MGWA-11 (680-219187-2)	8/2/22	14 05 Eastern	Water	Water	X	X	1	
EB-03 (680-219187-3)	8/2/22	13 50 Eastern	Water	Water	X	X	1	
MGWA-5 (680-219187-4)	8/2/22	15 50 Eastern	Water	Water	X	X	1	
MGWA-6 (680-219187-5)	8/2/22	12 55 Eastern	Water	Water	X	X	1	
MGWA-6A (680-219187-6)	8/2/22	14 20 Eastern	Water	Water	X	X	1	
MGWC-12 (680-219187-7)	8/2/22	16 05 Eastern	Water	Water	X	X	1	
FB-01 (680-219187-8)	8/2/22	13 10 Eastern	Water	Water	X	X	1	
FD-01 (680-219187-9)	8/2/22	Eastern	Water	Water	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC

**Possible Hazard Identification**  
 Unconfirmed  
 Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank, 2  
 Empty Kit Relinquished by  
 Relinquished by Date  
 Relinquished by Date/Time  
 Relinquished by Date/Time  
 Relinquished by Date/Time  
 Custody Seals Intact  
 Δ Yes Δ No  
 Cooler Temperature(s) °C and Other Remarks

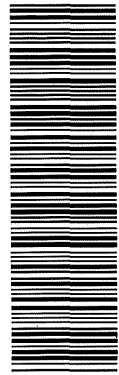
**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 Special Instructions/QC Requirements

Method of Shipment: \_\_\_\_\_  
 Received by \_\_\_\_\_ Date/Time 8/15/22  
 Received by \_\_\_\_\_ Date/Time 10/31  
 Received by \_\_\_\_\_ Date/Time  
 Company Eurofins  
 Company  
 Company

**Eurofins Savannah**  
 5102 LaRoche Avenue  
 Savannah, GA 31404  
 Phone 912-354-7858 Fax 912-352-0165

# Chain of Custody Record

**eurofins** Environment Testing  
 America



**Client Information (Sub Contract Lab)**  
 Client Contact: Lab PM Fuller, David  
 Shipping/Receiving: Phone E-Mail David Fuller@et.eurofins.com  
 Company: Eurofins Environment Testing Northeast, State - Georgia  
 Address: 301 Alpha Drive, RIDC Park, City  
 Pittsburgh, State, Zip PA, 15238  
 Phone 412-963-7058(Tel) 412-963-2468(Fax)  
 Email  
 Project Name Plant McIntosh - Ash Pond 1  
 Site

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Waste/Oil)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Custom-6 (App III and IV)	Analysis Requested	Preservation Codes
FD-02 (680-219323-1)	8/4/22	Eastern	Water	Water	X	X	X		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma L - EDA Other:
FB-02 (680-219323-2)	8/3/22	11 00 Eastern	Water	Water	X	X	X		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:
MGWC-1 (680-219323-3)	8/3/22	11 25 Eastern	Water	Water	X	X	X		
MGWC-8 (680-219323-4)	8/4/22	10 26 Eastern	Water	Water	X	X	X		
MGWC-2 (680-219323-5)	8/4/22	10 00 Eastern	Water	Water	X	X	X		
MGWC-3 (680-219323-6)	8/3/22	12 55 Eastern	Water	Water	X	X	X		
MGWC-7 (680-219323-7)	8/3/22	11 20 Eastern	Water	Water	X	X	X		
EB-04 (680-219323-8)	8/4/22	11 15 Eastern	Water	Water	X	X	X		

**Sample Identification - Client ID (Lab ID)**

Due Date Requested: 8/18/2022  
 TAT Requested (days):  
 PO #  
 WO #  
 Project # 68027747  
 SSOW#

**Special Instructions/Note:**

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

**Special Instructions/QC Requirements**  
 Primary Deliverable Rank: 2

Relinquished by	Date/Time	Company	Method of Shipment:
<i>[Signature]</i>	8/8/22	Company	Date/Time 8/12/22 9:50
Relinquished by	Date/Time	Company	Date/Time
Relinquished by	Date/Time	Company	Date/Time

Custody Seals Intact:  Yes  No  Custody Seal No

Cooler Temperature(s) °C and Other Remarks

# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-1

**Login Number: 219187**

**List Source: Eurofins Savannah**

**List Number: 1**

**Creator: Bissonnette, Ian**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-1

**Login Number: 219187**

**List Number: 3**

**Creator: Watson, Debbie**

**List Source: Eurofins Pittsburgh**

**List Creation: 08/05/22 01:24 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-1

**Login Number: 219323**

**List Source: Eurofins Savannah**

**List Number: 1**

**Creator: Padayao, Abigail**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-1

**Login Number: 219323**

**List Number: 3**

**Creator: Watson, Debbie**

**List Source: Eurofins Pittsburgh**

**List Creation: 08/09/22 07:08 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Savannah  
5102 LaRoche Avenue  
Savannah, GA 31404  
Tel: (912)354-7858

Laboratory Job ID: 680-219187-2

Client Project/Site: Plant McIntosh - Ash Pond 1  
Revision: 2

For:  
Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Attn: Kristen N Jurinko



Authorized for release by:  
11/7/2022 9:31:07 AM

David Fuller, Project Manager  
(770)344-8986  
[David.Fuller@et.eurofinsus.com](mailto:David.Fuller@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Definitions/Glossary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Qualifiers

### Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Sample Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-219187-1	MGWA-10	Water	08/02/22 11:20	08/03/22 11:00
680-219187-2	MGWA-11	Water	08/02/22 14:05	08/03/22 11:00
680-219187-3	EB-03	Water	08/02/22 13:50	08/03/22 11:00
680-219187-4	MGWA-5	Water	08/02/22 15:50	08/03/22 11:00
680-219187-5	MGWA-6	Water	08/02/22 12:55	08/03/22 11:00
680-219187-6	MGWA-6A	Water	08/02/22 14:20	08/03/22 11:00
680-219187-7	MGWC-12	Water	08/02/22 16:05	08/03/22 11:00
680-219187-8	FB-01	Water	08/02/22 13:10	08/03/22 11:00
680-219187-9	FD-01	Water	08/02/22 00:00	08/03/22 11:00
680-219323-1	FD-02	Water	08/04/22 00:00	08/05/22 09:20
680-219323-2	FB-02	Water	08/03/22 11:00	08/05/22 09:20
680-219323-3	MGWC-1	Water	08/03/22 11:25	08/05/22 09:20
680-219323-4	MGWC-8	Water	08/04/22 10:26	08/05/22 09:20
680-219323-5	MGWC-2	Water	08/04/22 10:00	08/05/22 09:20
680-219323-6	MGWC-3	Water	08/03/22 12:55	08/05/22 09:20
680-219323-7	MGWC-7	Water	08/03/22 11:20	08/05/22 09:20
680-219323-8	EB-04	Water	08/04/22 11:15	08/05/22 09:20

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Job ID: 680-219187-2

### Laboratory: Eurofins Savannah

#### Narrative

#### Job Narrative 680-219187-2

##### Revision 2

The report being provided is a revision of the original report sent on 9/14/2022. The report (revision 2) is being revised in order to correct sample results based on mislabeling of the following sample containers at the Savannah lab: EB-03 (680-219187-3), MGWA-5 (680-219187-4), MGWA-6 (680-219187-5), MGWA-6A (680-219187-6), MGWC-12 (680-219187-7), FB-01 (680-219187-8) and FD-01 (680-219187-9).

##### Report revision history

Revision 1 - 9/28/2022 - Reason - in order to report the batch MS/MSD for the samples in this deliverable.

##### Receipt

The samples were received on 8/3/2022 11:00 AM and 8/5/2022 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.2°C, 2.1°C and 5.0°C

##### Gas Flow Proportional Counter

Method 9315\_Ra226: Radium-226 Prep Batch 160-576868: Insufficient sample volume was available to perform a sample duplicate for the following samples: MGWA-10 (680-219187-1), MGWA-11 (680-219187-2), EB-03 (680-219187-3), MGWA-5 (680-219187-4), MGWA-6 (680-219187-5), MGWA-6A (680-219187-6), MGWC-12 (680-219187-7), FB-01 (680-219187-8) and FD-01 (680-219187-9). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315\_Ra226: Radium-226 Prep Batch 160-576868: The following samples were prepared at a reduced aliquot due to Matrix: MGWA-10 (680-219187-1), MGWA-11 (680-219187-2), EB-03 (680-219187-3), MGWA-5 (680-219187-4), MGWA-6 (680-219187-5), MGWA-6A (680-219187-6), MGWC-12 (680-219187-7), FB-01 (680-219187-8) and FD-01 (680-219187-9). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315\_Ra226: Radium-226 Batch 576868: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MGWA-10 (680-219187-1), MGWA-11 (680-219187-2), EB-03 (680-219187-3), MGWA-5 (680-219187-4), MGWA-6 (680-219187-5), MGWA-6A (680-219187-6), MGWC-12 (680-219187-7), FB-01 (680-219187-8), FD-01 (680-219187-9), (LCS 160-576868/2-A), (LCSD 160-576868/3-A) and (MB 160-576868/1-A)

Method 9315\_Ra226: Radium-226 Batch 578189: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FD-02 (680-219323-1), FB-02 (680-219323-2), MGWC-1 (680-219323-3), MGWC-8 (680-219323-4), MGWC-2 (680-219323-5), MGWC-3 (680-219323-6), MGWC-7 (680-219323-7), EB-04 (680-219323-8), (LCS 160-578189/2-A), (MB 160-578189/1-A), (480-200578-H-4-A), (480-200578-H-4-B MS) and (480-200578-H-4-C MSD)

Method 9320\_Ra228: Radium-228 Prep Batch 160-576870: Insufficient sample volume was available to perform a sample duplicate for the following samples: MGWA-10 (680-219187-1), MGWA-11 (680-219187-2), EB-03 (680-219187-3), MGWA-5 (680-219187-4), MGWA-6 (680-219187-5), MGWA-6A (680-219187-6), MGWC-12 (680-219187-7), FB-01 (680-219187-8) and FD-01 (680-219187-9). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320\_Ra228: Radium-228 Prep Batch 160-576870: The following samples were prepared at a reduced aliquot due to Matrix: MGWA-10 (680-219187-1), MGWA-11 (680-219187-2), EB-03 (680-219187-3), MGWA-5 (680-219187-4), MGWA-6 (680-219187-5), MGWA-6A (680-219187-6), MGWC-12 (680-219187-7), FB-01 (680-219187-8) and FD-01 (680-219187-9). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320\_Ra228: Radium-228 Batch 576870: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MGWA-10 (680-219187-1), MGWA-11 (680-219187-2), EB-03 (680-219187-3), MGWA-5 (680-219187-4), MGWA-6 (680-219187-5), MGWA-6A (680-219187-6), MGWC-12 (680-219187-7), FB-01 (680-219187-8), FD-01 (680-219187-9)

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

---

## Job ID: 680-219187-2 (Continued)

---

### Laboratory: Eurofins Savannah (Continued)

(680-219187-8), FD-01 (680-219187-9), (LCS 160-576870/2-A), (LCSD 160-576870/3-A) and (MB 160-576870/1-A)

Method 9320\_Ra228: Radium-228 Batch 578198: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FD-02 (680-219323-1), FB-02 (680-219323-2), MGWC-1 (680-219323-3), MGWC-8 (680-219323-4), MGWC-2 (680-219323-5), MGWC-3 (680-219323-6), MGWC-7 (680-219323-7), EB-04 (680-219323-8), (LCS 160-578198/2-A), (MB 160-578198/1-A), (480-200578-H-4-D), (480-200578-H-4-E MS) and (480-200578-H-4-F MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### Rad

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: MGWA-10**

**Lab Sample ID: 680-219187-1**

Date Collected: 08/02/22 11:20

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.295		0.136	0.138	1.00	0.154	pCi/L	08/08/22 09:41	08/30/22 11:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					08/08/22 09:41	08/30/22 11:12	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0557	U	0.285	0.285	1.00	0.565	pCi/L	08/08/22 10:06	08/23/22 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					08/08/22 10:06	08/23/22 13:19	1
Y Carrier	102		40 - 110					08/08/22 10:06	08/23/22 13:19	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.239	U	0.316	0.317	5.00	0.565	pCi/L		08/30/22 16:25	1

**Client Sample ID: MGWA-11**

**Lab Sample ID: 680-219187-2**

Date Collected: 08/02/22 14:05

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.105	U	0.126	0.127	1.00	0.208	pCi/L	08/08/22 09:41	08/30/22 11:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.0		40 - 110					08/08/22 09:41	08/30/22 11:12	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.862		0.451	0.458	1.00	0.628	pCi/L	08/08/22 10:06	08/23/22 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.0		40 - 110					08/08/22 10:06	08/23/22 13:19	1
Y Carrier	95.3		40 - 110					08/08/22 10:06	08/23/22 13:19	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: MGWA-11**

**Lab Sample ID: 680-219187-2**

Date Collected: 08/02/22 14:05

Matrix: Water

Date Received: 08/03/22 11:00

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.967		0.468	0.475	5.00	0.628	pCi/L		08/30/22 16:25	1

**Client Sample ID: EB-03**

**Lab Sample ID: 680-219187-3**

Date Collected: 08/02/22 13:50

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0271	U	0.0583	0.0583	1.00	0.139	pCi/L	08/08/22 09:41	08/30/22 11:09	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	101		40 - 110					08/08/22 09:41	08/30/22 11:09	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.240	U	0.309	0.310	1.00	0.514	pCi/L	08/08/22 10:06	08/23/22 13:24	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	101		40 - 110					08/08/22 10:06	08/23/22 13:24	1
Y Carrier	102		40 - 110					08/08/22 10:06	08/23/22 13:24	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.213	U	0.314	0.315	5.00	0.514	pCi/L		08/30/22 16:25	1

**Client Sample ID: MGWA-5**

**Lab Sample ID: 680-219187-4**

Date Collected: 08/02/22 15:50

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.109	U	0.0982	0.0986	1.00	0.150	pCi/L	08/08/22 09:41	08/30/22 11:12	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	100		40 - 110					08/08/22 09:41	08/30/22 11:12	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: MGWA-5

Date Collected: 08/02/22 15:50

Date Received: 08/03/22 11:00

## Lab Sample ID: 680-219187-4

Matrix: Water

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.241	U	0.358	0.358	1.00	0.605	pCi/L	08/08/22 10:06	08/23/22 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					08/08/22 10:06	08/23/22 13:19	1
Y Carrier	96.1		40 - 110					08/08/22 10:06	08/23/22 13:19	1

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.350	U	0.371	0.371	5.00	0.605	pCi/L		08/30/22 16:25	1

## Client Sample ID: MGWA-6

Date Collected: 08/02/22 12:55

Date Received: 08/03/22 11:00

## Lab Sample ID: 680-219187-5

Matrix: Water

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.223		0.133	0.135	1.00	0.176	pCi/L	08/08/22 09:41	08/30/22 11:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					08/08/22 09:41	08/30/22 11:12	1

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.461	U	0.361	0.364	1.00	0.546	pCi/L	08/08/22 10:06	08/23/22 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					08/08/22 10:06	08/23/22 13:19	1
Y Carrier	93.5		40 - 110					08/08/22 10:06	08/23/22 13:19	1

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.683		0.385	0.388	5.00	0.546	pCi/L		08/30/22 16:25	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: MGWA-6A**

**Lab Sample ID: 680-219187-6**

Date Collected: 08/02/22 14:20

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.385		0.149	0.153	1.00	0.157	pCi/L	08/08/22 09:41	08/30/22 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					08/08/22 09:41	08/30/22 11:13	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0348	U	0.329	0.329	1.00	0.607	pCi/L	08/08/22 10:06	08/23/22 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					08/08/22 10:06	08/23/22 13:19	1
Y Carrier	102		40 - 110					08/08/22 10:06	08/23/22 13:19	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.420	U	0.361	0.363	5.00	0.607	pCi/L		08/30/22 16:25	1

**Client Sample ID: MGWC-12**

**Lab Sample ID: 680-219187-7**

Date Collected: 08/02/22 16:05

Matrix: Water

Date Received: 08/03/22 11:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.149	U	0.132	0.133	1.00	0.206	pCi/L	08/08/22 09:41	08/30/22 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					08/08/22 09:41	08/30/22 11:13	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.927		0.394	0.403	1.00	0.503	pCi/L	08/08/22 10:06	08/23/22 13:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					08/08/22 10:06	08/23/22 13:24	1
Y Carrier	102		40 - 110					08/08/22 10:06	08/23/22 13:24	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: MGWC-12

## Lab Sample ID: 680-219187-7

Date Collected: 08/02/22 16:05

Matrix: Water

Date Received: 08/03/22 11:00

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.08		0.416	0.424	5.00	0.503	pCi/L		08/30/22 16:25	1

## Client Sample ID: FB-01

## Lab Sample ID: 680-219187-8

Date Collected: 08/02/22 13:10

Matrix: Water

Date Received: 08/03/22 11:00

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0139	U	0.0620	0.0620	1.00	0.124	pCi/L	08/08/22 09:41	08/30/22 11:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					08/08/22 09:41	08/30/22 11:08	1

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.102	U	0.341	0.341	1.00	0.611	pCi/L	08/08/22 10:06	08/23/22 13:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					08/08/22 10:06	08/23/22 13:24	1
Y Carrier	96.8		40 - 110					08/08/22 10:06	08/23/22 13:24	1

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.116	U	0.347	0.347	5.00	0.611	pCi/L		08/30/22 16:25	1

## Client Sample ID: FD-01

## Lab Sample ID: 680-219187-9

Date Collected: 08/02/22 00:00

Matrix: Water

Date Received: 08/03/22 11:00

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0985	U	0.0846	0.0851	1.00	0.123	pCi/L	08/08/22 09:41	08/30/22 11:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					08/08/22 09:41	08/30/22 11:08	1

Eurofins Savannah



# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: FD-01**  
**Date Collected: 08/02/22 00:00**  
**Date Received: 08/03/22 11:00**

**Lab Sample ID: 680-219187-9**  
**Matrix: Water**

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.313	U	0.342	0.343	1.00	0.554	pCi/L	08/08/22 10:06	08/23/22 13:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					08/08/22 10:06	08/23/22 13:24	1
Y Carrier	94.6		40 - 110					08/08/22 10:06	08/23/22 13:24	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.412	U	0.352	0.353	5.00	0.554	pCi/L		08/30/22 16:25	1

**Client Sample ID: FD-02**  
**Date Collected: 08/04/22 00:00**  
**Date Received: 08/05/22 09:20**

**Lab Sample ID: 680-219323-1**  
**Matrix: Water**

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.263</b>		0.0903	0.0933	1.00	0.0784	pCi/L	08/16/22 14:08	09/07/22 07:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					08/16/22 14:08	09/07/22 07:05	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.452	U	0.306	0.308	1.00	0.456	pCi/L	08/16/22 15:12	08/25/22 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					08/16/22 15:12	08/25/22 11:14	1
Y Carrier	86.4		40 - 110					08/16/22 15:12	08/25/22 11:14	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>0.715</b>		0.319	0.322	5.00	0.456	pCi/L		09/07/22 15:50	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: FB-02

Date Collected: 08/03/22 11:00

Date Received: 08/05/22 09:20

## Lab Sample ID: 680-219323-2

Matrix: Water

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00394	U	0.0436	0.0436	1.00	0.0934	pCi/L	08/16/22 14:08	09/07/22 07:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		40 - 110					08/16/22 14:08	09/07/22 07:05	1

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0683	U	0.305	0.305	1.00	0.546	pCi/L	08/16/22 15:12	08/25/22 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		40 - 110					08/16/22 15:12	08/25/22 11:15	1
Y Carrier	87.1		40 - 110					08/16/22 15:12	08/25/22 11:15	1

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0644	U	0.308	0.308	5.00	0.546	pCi/L		09/07/22 15:50	1

## Client Sample ID: MGWC-1

Date Collected: 08/03/22 11:25

Date Received: 08/05/22 09:20

## Lab Sample ID: 680-219323-3

Matrix: Water

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.40		0.198	0.234	1.00	0.0840	pCi/L	08/16/22 14:08	09/07/22 07:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					08/16/22 14:08	09/07/22 07:05	1

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.799		0.337	0.345	1.00	0.433	pCi/L	08/16/22 15:12	08/25/22 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					08/16/22 15:12	08/25/22 11:15	1
Y Carrier	87.1		40 - 110					08/16/22 15:12	08/25/22 11:15	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: MGWC-1**

**Lab Sample ID: 680-219323-3**

Date Collected: 08/03/22 11:25

Matrix: Water

Date Received: 08/05/22 09:20

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.20		0.391	0.417	5.00	0.433	pCi/L		09/07/22 15:50	1

**Client Sample ID: MGWC-8**

**Lab Sample ID: 680-219323-4**

Date Collected: 08/04/22 10:26

Matrix: Water

Date Received: 08/05/22 09:20

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.534		0.126	0.135	1.00	0.0846	pCi/L	08/16/22 14:08	09/07/22 07:05	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	93.0		40 - 110					08/16/22 14:08	09/07/22 07:05	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.703		0.366	0.371	1.00	0.513	pCi/L	08/16/22 15:12	08/25/22 11:15	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	93.0		40 - 110					08/16/22 15:12	08/25/22 11:15	1
Y Carrier	83.7		40 - 110					08/16/22 15:12	08/25/22 11:15	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.24		0.387	0.395	5.00	0.513	pCi/L		09/07/22 15:50	1

**Client Sample ID: MGWC-2**

**Lab Sample ID: 680-219323-5**

Date Collected: 08/04/22 10:00

Matrix: Water

Date Received: 08/05/22 09:20

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.106		0.0652	0.0659	1.00	0.0821	pCi/L	08/16/22 14:08	09/07/22 07:05	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	96.5		40 - 110					08/16/22 14:08	09/07/22 07:05	1

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: MGWC-2

## Lab Sample ID: 680-219323-5

Date Collected: 08/04/22 10:00

Matrix: Water

Date Received: 08/05/22 09:20

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.526		0.327	0.331	1.00	0.480	pCi/L	08/16/22 15:12	08/25/22 11:15	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	96.5		40 - 110					08/16/22 15:12	08/25/22 11:15	1
Y Carrier	85.2		40 - 110					08/16/22 15:12	08/25/22 11:15	1

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.632		0.333	0.337	5.00	0.480	pCi/L		09/07/22 15:50	1

## Client Sample ID: MGWC-3

## Lab Sample ID: 680-219323-6

Date Collected: 08/03/22 12:55

Matrix: Water

Date Received: 08/05/22 09:20

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.36		0.198	0.233	1.00	0.111	pCi/L	08/16/22 14:08	09/07/22 07:05	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	96.0		40 - 110					08/16/22 14:08	09/07/22 07:05	1

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.20		0.380	0.395	1.00	0.428	pCi/L	08/16/22 15:12	08/25/22 11:16	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	96.0		40 - 110					08/16/22 15:12	08/25/22 11:16	1
Y Carrier	86.0		40 - 110					08/16/22 15:12	08/25/22 11:16	1

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.56		0.428	0.459	5.00	0.428	pCi/L		09/07/22 15:50	1

# Client Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: MGWC-7**

**Lab Sample ID: 680-219323-7**

Date Collected: 08/03/22 11:20

Matrix: Water

Date Received: 08/05/22 09:20

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.922		0.185	0.203	1.00	0.115	pCi/L	08/16/22 14:08	09/07/22 07:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.3		40 - 110					08/16/22 14:08	09/07/22 07:06	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.184	U	0.367	0.367	1.00	0.637	pCi/L	08/16/22 15:12	08/25/22 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.3		40 - 110					08/16/22 15:12	08/25/22 11:16	1
Y Carrier	87.1		40 - 110					08/16/22 15:12	08/25/22 11:16	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.11		0.411	0.419	5.00	0.637	pCi/L		09/07/22 15:50	1

**Client Sample ID: EB-04**

**Lab Sample ID: 680-219323-8**

Date Collected: 08/04/22 11:15

Matrix: Water

Date Received: 08/05/22 09:20

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0124	U	0.0452	0.0453	1.00	0.0886	pCi/L	08/16/22 14:08	09/07/22 07:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		40 - 110					08/16/22 14:08	09/07/22 07:06	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.355	U	0.274	0.276	1.00	0.416	pCi/L	08/16/22 15:12	08/25/22 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		40 - 110					08/16/22 15:12	08/25/22 11:16	1
Y Carrier	87.1		40 - 110					08/16/22 15:12	08/25/22 11:16	1

Eurofins Savannah

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: EB-04**  
**Date Collected: 08/04/22 11:15**  
**Date Received: 08/05/22 09:20**

**Lab Sample ID: 680-219323-8**  
**Matrix: Water**

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.368	U	0.278	0.280	5.00	0.416	pCi/L		09/07/22 15:50	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Tracer/Carrier Summary

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	
480-200578-H-4-B MS	Matrix Spike	92.3	
480-200578-H-4-C MSD	Matrix Spike Duplicate	95.0	
680-219187-1	MGWA-10	87.5	
680-219187-2	MGWA-11	93.0	
680-219187-3	EB-03	101	
680-219187-4	MGWA-5	100	
680-219187-5	MGWA-6	94.3	
680-219187-6	MGWA-6A	95.3	
680-219187-7	MGWC-12	100	
680-219187-8	FB-01	100	
680-219187-9	FD-01	95.3	
680-219323-1	FD-02	96.3	
680-219323-2	FB-02	95.8	
680-219323-3	MGWC-1	97.3	
680-219323-4	MGWC-8	93.0	
680-219323-5	MGWC-2	96.5	
680-219323-6	MGWC-3	96.0	
680-219323-7	MGWC-7	71.3	
680-219323-8	EB-04	92.8	
LCS 160-576868/2-A	Lab Control Sample	97.0	
LCS 160-578189/2-A	Lab Control Sample	101	
LCS 160-576868/3-A	Lab Control Sample Dup	98.8	
MB 160-576868/1-A	Method Blank	94.0	
MB 160-578189/1-A	Method Blank	101	

**Tracer/Carrier Legend**

Ba = Ba Carrier

## Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
480-200578-H-4-E MS	Matrix Spike	92.3	84.5
480-200578-H-4-F MSD	Matrix Spike Duplicate	95.0	83.0
680-219187-1	MGWA-10	87.5	102
680-219187-2	MGWA-11	93.0	95.3
680-219187-3	EB-03	101	102
680-219187-4	MGWA-5	100	96.1
680-219187-5	MGWA-6	94.3	93.5
680-219187-6	MGWA-6A	95.3	102
680-219187-7	MGWC-12	100	102
680-219187-8	FB-01	100	96.8
680-219187-9	FD-01	95.3	94.6
680-219323-1	FD-02	96.3	86.4
680-219323-2	FB-02	95.8	87.1
680-219323-3	MGWC-1	97.3	87.1
680-219323-4	MGWC-8	93.0	83.7
680-219323-5	MGWC-2	96.5	85.2

# Tracer/Carrier Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Method: 9320 - Radium-228 (GFPC) (Continued)**

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
680-219323-6	MGWC-3	96.0	86.0
680-219323-7	MGWC-7	71.3	87.1
680-219323-8	EB-04	92.8	87.1
LCS 160-576870/2-A	Lab Control Sample	97.0	102
LCS 160-578198/2-A	Lab Control Sample	101	86.0
LCSD 160-576870/3-A	Lab Control Sample Dup	98.8	97.6
MB 160-576870/1-A	Method Blank	94.0	103
MB 160-578198/1-A	Method Blank	101	84.1

### Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier



# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-576868/1-A**  
**Matrix: Water**  
**Analysis Batch: 580032**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 576868**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.003202	U	0.0629	0.0629	1.00	0.129	pCi/L	08/08/22 09:41	08/30/22 11:10	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110				08/08/22 09:41		08/30/22 11:10	1

**Lab Sample ID: LCS 160-576868/2-A**  
**Matrix: Water**  
**Analysis Batch: 580032**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 576868**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.23		1.08	1.00	0.130	pCi/L	90	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	97.0		40 - 110						

**Lab Sample ID: LCSD 160-576868/3-A**  
**Matrix: Water**  
**Analysis Batch: 580032**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 576868**

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	Limit
				Uncert. (2σ+/-)							
Radium-226	11.3	9.676		1.03	1.00	0.137	pCi/L	85	75 - 125	0.26	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	98.8		40 - 110								

**Lab Sample ID: MB 160-578189/1-A**  
**Matrix: Water**  
**Analysis Batch: 581044**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 578189**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.03210	U	0.0520	0.0521	1.00	0.0906	pCi/L	08/16/22 14:08	09/07/22 07:02	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	101		40 - 110				08/16/22 14:08		09/07/22 07:02	1

**Lab Sample ID: LCS 160-578189/2-A**  
**Matrix: Water**  
**Analysis Batch: 581044**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 578189**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.902		1.02	1.00	0.0772	pCi/L	87	75 - 125

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-578189/2-A  
Matrix: Water  
Analysis Batch: 581044

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 578189

		LCS	LCS		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	101		40 - 110		

Lab Sample ID: 480-200578-H-4-B MS  
Matrix: Water  
Analysis Batch: 581044

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 578189

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
												RER	Limit
Radium-226	0.120		11.4	10.83		1.12	1.00	0.0973	pCi/L	94	60 - 140		

		MS	MS		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	92.3		40 - 110		

Lab Sample ID: 480-200578-H-4-C MSD  
Matrix: Water  
Analysis Batch: 581044

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 578189

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	Limit
Radium-226	0.120		11.4	9.701		1.01	1.00	0.0935	pCi/L	84	60 - 140	0.53	1

		MSD	MSD		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	95.0		40 - 110		

## Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-576870/1-A  
Matrix: Water  
Analysis Batch: 579092

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 576870

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.03324	U	0.225	0.225	1.00	0.417	pCi/L	08/08/22 10:06	08/23/22 13:15	1

		MB	MB	Limits	Prepared	Analyzed	Dil Fac
Carrier	%Yield	Qualifier	Limits				
Ba Carrier	94.0		40 - 110	08/08/22 10:06	08/23/22 13:15	1	
Y Carrier	103		40 - 110	08/08/22 10:06	08/23/22 13:15	1	

Lab Sample ID: LCS 160-576870/2-A  
Matrix: Water  
Analysis Batch: 579092

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 576870

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.34	8.639		1.14	1.00	0.387	pCi/L	104	75 - 125

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: LCS 160-576870/2-A**  
**Matrix: Water**  
**Analysis Batch: 579092**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 576870**

Carrier	LCS		Limits
	%Yield	Qualifier	
Ba Carrier	97.0		40 - 110
Y Carrier	102		40 - 110

**Lab Sample ID: LCSD 160-576870/3-A**  
**Matrix: Water**  
**Analysis Batch: 579099**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 576870**

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
									75 - 125	0.27	1	
Radium-228	8.34	8.030		1.10	1.00	0.456	pCi/L	96	75 - 125	0.27	1	

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	98.8		40 - 110
Y Carrier	97.6		40 - 110

**Lab Sample ID: MB 160-578198/1-A**  
**Matrix: Water**  
**Analysis Batch: 579454**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 578198**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								08/16/22 15:12	08/25/22 11:12	08/16/22 15:12	08/25/22 11:12	1
Radium-228	0.8480		0.352	0.360	1.00	0.459	pCi/L	08/16/22 15:12	08/25/22 11:12	08/16/22 15:12	08/25/22 11:12	1

Carrier	MB		Limits	Prepared		Analyzed		Dil Fac
	%Yield	Qualifier		08/16/22 15:12	08/25/22 11:12	08/16/22 15:12	08/25/22 11:12	
Ba Carrier	101		40 - 110	08/16/22 15:12	08/25/22 11:12	08/16/22 15:12	08/25/22 11:12	1
Y Carrier	84.1		40 - 110	08/16/22 15:12	08/25/22 11:12	08/16/22 15:12	08/25/22 11:12	1

**Lab Sample ID: LCS 160-578198/2-A**  
**Matrix: Water**  
**Analysis Batch: 579454**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 578198**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
									75 - 125	
Radium-228	8.33	8.701		1.15	1.00	0.369	pCi/L	104	75 - 125	

Carrier	LCS		Limits
	%Yield	Qualifier	
Ba Carrier	101		40 - 110
Y Carrier	86.0		40 - 110

**Lab Sample ID: 480-200578-H-4-E MS**  
**Matrix: Water**  
**Analysis Batch: 579454**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 578198**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
											60 - 140	
Radium-228	0.834		8.39	8.739		1.20	1.00	0.508	pCi/L	94	60 - 140	

Eurofins Savannah

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: 480-200578-H-4-E MS**  
**Matrix: Water**  
**Analysis Batch: 579454**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 578198**

Carrier	MS MS		Limits
	%Yield	Qualifier	
Ba Carrier	92.3		40 - 110
Y Carrier	84.5		40 - 110

**Lab Sample ID: 480-200578-H-4-F MSD**  
**Matrix: Water**  
**Analysis Batch: 579454**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 578198**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit

Carrier	MSD MSD		Limits
	%Yield	Qualifier	
Ba Carrier	95.0		40 - 110
Y Carrier	83.0		40 - 110

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Rad

### Prep Batch: 576868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total/NA	Water	PrecSep-21	
680-219187-2	MGWA-11	Total/NA	Water	PrecSep-21	
680-219187-3	EB-03	Total/NA	Water	PrecSep-21	
680-219187-4	MGWA-5	Total/NA	Water	PrecSep-21	
680-219187-5	MGWA-6	Total/NA	Water	PrecSep-21	
680-219187-6	MGWA-6A	Total/NA	Water	PrecSep-21	
680-219187-7	MGWC-12	Total/NA	Water	PrecSep-21	
680-219187-8	FB-01	Total/NA	Water	PrecSep-21	
680-219187-9	FD-01	Total/NA	Water	PrecSep-21	
MB 160-576868/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-576868/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-576868/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

### Prep Batch: 576870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219187-1	MGWA-10	Total/NA	Water	PrecSep_0	
680-219187-2	MGWA-11	Total/NA	Water	PrecSep_0	
680-219187-3	EB-03	Total/NA	Water	PrecSep_0	
680-219187-4	MGWA-5	Total/NA	Water	PrecSep_0	
680-219187-5	MGWA-6	Total/NA	Water	PrecSep_0	
680-219187-6	MGWA-6A	Total/NA	Water	PrecSep_0	
680-219187-7	MGWC-12	Total/NA	Water	PrecSep_0	
680-219187-8	FB-01	Total/NA	Water	PrecSep_0	
680-219187-9	FD-01	Total/NA	Water	PrecSep_0	
MB 160-576870/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-576870/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-576870/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

### Prep Batch: 578189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total/NA	Water	PrecSep-21	
680-219323-2	FB-02	Total/NA	Water	PrecSep-21	
680-219323-3	MGWC-1	Total/NA	Water	PrecSep-21	
680-219323-4	MGWC-8	Total/NA	Water	PrecSep-21	
680-219323-5	MGWC-2	Total/NA	Water	PrecSep-21	
680-219323-6	MGWC-3	Total/NA	Water	PrecSep-21	
680-219323-7	MGWC-7	Total/NA	Water	PrecSep-21	
680-219323-8	EB-04	Total/NA	Water	PrecSep-21	
MB 160-578189/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-578189/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
480-200578-H-4-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
480-200578-H-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

### Prep Batch: 578198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-1	FD-02	Total/NA	Water	PrecSep_0	
680-219323-2	FB-02	Total/NA	Water	PrecSep_0	
680-219323-3	MGWC-1	Total/NA	Water	PrecSep_0	
680-219323-4	MGWC-8	Total/NA	Water	PrecSep_0	
680-219323-5	MGWC-2	Total/NA	Water	PrecSep_0	
680-219323-6	MGWC-3	Total/NA	Water	PrecSep_0	

Eurofins Savannah

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Rad (Continued)

### Prep Batch: 578198 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219323-7	MGWC-7	Total/NA	Water	PrecSep_0	
680-219323-8	EB-04	Total/NA	Water	PrecSep_0	
MB 160-578198/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-578198/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
480-200578-H-4-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
480-200578-H-4-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: MGWA-10

## Lab Sample ID: 680-219187-1

Date Collected: 08/02/22 11:20

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			762.48 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580032	08/30/22 11:12	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			762.48 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:19	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-11

## Lab Sample ID: 680-219187-2

Date Collected: 08/02/22 14:05

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			754.56 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580032	08/30/22 11:12	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			754.56 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:19	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: EB-03

## Lab Sample ID: 680-219187-3

Date Collected: 08/02/22 13:50

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			764.27 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580031	08/30/22 11:09	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			764.27 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:24	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-5

## Lab Sample ID: 680-219187-4

Date Collected: 08/02/22 15:50

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.53 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580032	08/30/22 11:12	FLC	EET SL
Instrument ID: GFPCBLUE										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: MGWA-5

## Lab Sample ID: 680-219187-4

Date Collected: 08/02/22 15:50

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			750.53 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:19	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-6

## Lab Sample ID: 680-219187-5

Date Collected: 08/02/22 12:55

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			747.01 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580032	08/30/22 11:12	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			747.01 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:19	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWA-6A

## Lab Sample ID: 680-219187-6

Date Collected: 08/02/22 14:20

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			742.04 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580032	08/30/22 11:13	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			742.04 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:19	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-12

## Lab Sample ID: 680-219187-7

Date Collected: 08/02/22 16:05

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			766.70 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580032	08/30/22 11:13	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			766.70 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:24	JCB	EET SL
Instrument ID: GFPCRED										

Eurofins Savannah



# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: MGWC-12

Lab Sample ID: 680-219187-7

Date Collected: 08/02/22 16:05

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL

## Client Sample ID: FB-01

Lab Sample ID: 680-219187-8

Date Collected: 08/02/22 13:10

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			742.20 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580031	08/30/22 11:08	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			742.20 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:24	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: FD-01

Lab Sample ID: 680-219187-9

Date Collected: 08/02/22 00:00

Matrix: Water

Date Received: 08/03/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			754.35 mL	1.0 g	576868	08/08/22 09:41	BMP	EET SL
Total/NA	Analysis	9315		1			580031	08/30/22 11:08	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			754.35 mL	1.0 g	576870	08/08/22 10:06	BMP	EET SL
Total/NA	Analysis	9320		1			579094	08/23/22 13:24	JCB	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			580054	08/30/22 16:25	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: FD-02

Lab Sample ID: 680-219323-1

Date Collected: 08/04/22 00:00

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.60 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:05	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			999.60 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:14	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL
Instrument ID: NOEQUIP										

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: FB-02**

**Lab Sample ID: 680-219323-2**

Date Collected: 08/03/22 11:00

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			994.82 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:05	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			994.82 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:15	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-1**

**Lab Sample ID: 680-219323-3**

Date Collected: 08/03/22 11:25

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.59 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:05	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			999.59 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:15	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-8**

**Lab Sample ID: 680-219323-4**

Date Collected: 08/04/22 10:26

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			996.16 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:05	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			996.16 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:15	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-2**

**Lab Sample ID: 680-219323-5**

Date Collected: 08/04/22 10:00

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.02 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:05	FLC	EET SL
Instrument ID: GFPCRED										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Client Sample ID: MGWC-2

## Lab Sample ID: 680-219323-5

Date Collected: 08/04/22 10:00

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.02 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:15	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-3

## Lab Sample ID: 680-219323-6

Date Collected: 08/03/22 12:55

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.98 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:05	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			1000.98 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:16	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MGWC-7

## Lab Sample ID: 680-219323-7

Date Collected: 08/03/22 11:20

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			997.44 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:06	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			997.44 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:16	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: EB-04

## Lab Sample ID: 680-219323-8

Date Collected: 08/04/22 11:15

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1003.64 mL	1.0 g	578189	08/16/22 14:08	MS	EET SL
Total/NA	Analysis	9315		1			581044	09/07/22 07:06	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			1003.64 mL	1.0 g	578198	08/16/22 15:12	MS	EET SL
Total/NA	Analysis	9320		1			579454	08/25/22 11:16	FLC	EET SL
Instrument ID: GFPCRED										

Eurofins Savannah

# Lab Chronicle

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

**Client Sample ID: EB-04**

**Lab Sample ID: 680-219323-8**

**Date Collected: 08/04/22 11:15**

**Matrix: Water**

**Date Received: 08/05/22 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			581104	09/07/22 15:50	EMH	EET SL

**Laboratory References:**

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Accreditation/Certification Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

## Laboratory: Eurofins St. Louis

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87689	06-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25

1

2

3

4

5

6

7

8

9

10

11

12

13

# Method Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219187-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

#### Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

#### Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

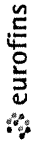
# Chain of Custody Record



<b>Client Information</b>		Sampler: <u>A. Schnitzler, J. Benford</u>		Lab PM: <u>Fuller, David</u>		Center Tracking No(s)		COC No:	
Company: <u>GA Power</u>		Phone: <u>720-594-5498</u>		E-Mail: <u>david.fuller@et.eurofins.com</u>		Page:		Job #:	
Address: <u>241 Ralph McGill Blvd SE</u>		City: <u>Atlanta</u>		State Zip: <u>GA, 30308</u>		Lab Project #: <u>68027747</u>		PO #:	
Email: <u>SCS Contacts / ACC Contacts</u>		Project Name: <u>Plant McIntosh - Ash Pond 1</u>		Site: <u>Georgia</u>		SSOW#:		Due Date Requested	
TAT Requested (days)		Sample Date (mm/dd/yy)		Sample Time (hh:mm)		Sample Type (C=comp, G=grab)		Matrix (WC=ground water, WS=surface water, WC=quality control)	
Sample Identification		Preservation Code:		Field Filled Sample (Yes or No)		Perform MS/MSD (Yes or No)		App. III Metals (B, Ca)	
M 6WA-10		G		N		N		D	
M 6WA-11		G		N		N		D	
EB-03		G		N		N		D	
M 6WA-5		G		N		N		D	
M 6WA-6		G		N		N		D	
M 6WA-6A		G		N		N		D	
M 6WC-1Z		G		N		N		D	
FB-01		G		N		N		D	
FD-01		G		N		N		D	
Special Instructions/Note:		Total Number of containers		App. IV Metals (Sb, As, Ba, Be, Bi, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti)		Radium 226 & 228 (SM-846 9315/9320)		Special Instructions/Note:	
Full APP III and APP IV		6		N		N		Full APP III and APP IV	
pH= 5.41		WG		N		N		pH= 5.41	
pH= 7.57		WG		N		N		pH= 7.57	
pH= N/A		WG		N		N		pH= N/A	
pH= 7.45		WG		N		N		pH= 7.45	
pH= 7.10		WG		N		N		pH= 7.10	
pH= 7.27		WG		N		N		pH= 7.27	
pH= 7.06		WG		N		N		pH= 7.06	
pH= N/A		WG		N		N		pH= N/A	
pH= N/A		WG		N		N		pH= N/A	
pH=		G		N		N		pH=	
pH=		G		N		N		pH=	



# Chain of Custody Record



<b>Client Information</b> Client Contact: <i>A. Smith</i> SCS Contacts: <i>770-594-5990</i> Company: <i>Bechtel</i> Lab PM: <i>Fuller David</i> E-Mail: <i>david.fuller@et.eurofins.com</i>		Carrier Tracking No(s): COC No.: Page: Job #:	
Due Date Requested: TAT Requested (days): Lab Project #: <i>68027747</i> PO #: <i>404-506-7116(Tel)</i> Email: <i>SCS Contacts / ACC Contacts</i> Project Name: <i>Plant McIntosh - Ash Pond 1</i> Site: <i>Georgia</i>		<b>Analysis Requested</b> App. I Metals (EPA 300.0 & SM 2540C) App. IV Metals (Sb, As, Ba, Be, Bi, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl) Radium 226 & 228 (SW-846 9315/9320) App. III Metals (B, Ca) Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No)	
Address: <i>241 Ralph McGill Blvd SE</i> City: <i>Atlanta</i> State Zip: <i>GA, 30308</i> Phone: <i>404-506-7116(Tel)</i> Email: <i>SCS Contacts / ACC Contacts</i> Project Name: <i>Plant McIntosh - Ash Pond 1</i> Site: <i>Georgia</i>		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify)	
<b>Sample Identification</b> Sample ID: <i>FD-02</i> <i>FB-02</i> <i>M GwC-1</i> <i>M GwC-8</i> <i>M GwC-20</i> <i>M GwC-2</i> <i>M GwC-3</i> <i>M GwC-7</i> <i>EB-04</i>		Sample Date (mm/dd/yy): <i>08/04/22</i> <i>08/03/22</i> <i>08/03/22</i> <i>08/04/22</i> <i>08/04/22</i> <i>08/04/22</i> <i>08/03/22</i> <i>08/03/22</i> <i>08/04/22</i>	
Sample Type (C=Comp, G=grab): Sample Time (hh:mm): Preservation Code:		Total Number of Containers: pH: <i>N/A</i> <i>N/A</i> <i>7.23</i> <i>6.50</i> <i>7.37</i> <i>6.91</i> <i>6.86</i> <i>N/A</i>	
Special Instructions/Note: Full APP III and APP IV		Special Instructions/Note: Full APP III and APP IV	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested I, II, III, IV, Other (specify):		Special Instructions/QC Requirements	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>[Signature]</i> Date/Time: <i>8/4/22 1345</i> Company: <i>Acc</i>		Received by: <i>[Signature]</i> Date/Time: <i>8/4/22 1345</i> Company: <i>Acc</i>	
Relinquished by: <i>[Signature]</i> Date/Time: <i>8/5/22 915</i> Company: <i>Acc</i>		Received by: <i>[Signature]</i> Date/Time: <i>8/5/22 915</i> Company: <i>Acc</i>	
Relinquished by: <i>[Signature]</i> Date/Time: <i>8/5/22 915</i> Company: <i>Acc</i>		Received by: <i>[Signature]</i> Date/Time: <i>8/5/22 915</i> Company: <i>Acc</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: <i>1.3   1.8</i>	





- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

UNCORRECTED TEMP  
 THERMOMETER ID  
 Initials CF  
 PT-WI-SR-001 effective 11/8/18  
**XN AGCA**  
 TRK# 1328 9416 0870  
 15238  
 PA-US  
 P11  
**PRIORITY OVERNIGHT**  
**FRI - 05 AUG 10:30A**

  
**FedEx Express**  
 (412) 963-7068  
 P0: YES  
 REF: 5680-138153  
**PITTSBURGH PA 15238**  
**RIDC PARK**  
**301 ALPHA DRIVE**  
**SHIPPING/RECEIVING**  
**EUROFINS ENVIRONMENT TESTING NORTH**

TO: SAVANNAH, GA 31404  
 UNITED STATES US  
 SHIPPING/TESTAMERICA  
 8102 LA ROCHE AVE  
 ORIGIN ID: SAVA (912) 354-7858  
 REF: 5680-138153  
 SHIP DATE: 04AUG22  
 ACTWGT: 10.00 LB MAN  
 CAD: 0801261/CAFE3614  
 BILL SENDER

THE LEADER IN ENVIRONMENTAL TESTING  
**TestAmerica**

Do not  
 680-219187 Waybill  


# Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM	Carrier Tracking No(s)		COC No							
Shipping/Receiving		Fuller, David			680-703588 1							
Company		E-Mail	State of Origin		Page							
Tests/America Laboratories, Inc.		David.Fuller@et.eurofins.com	Georgia		Page 1 of 1							
Address		Accreditations Required (See note)		Job #	680-219187-2							
13715 Rider Trail North,		State - Georgia		<b>Preservation Codes:</b>								
City		Due Date Requested:		M - Hexane								
Earth City		9/14/2022		N - None								
State, Zip		TAT Requested (days):		O - AsNaO2								
MO, 63045		1		P - Na2O4S								
Phone		PO #	<b>Analysis Requested</b>									
314-298-8566(Tel) 314-298-8757(Fax)		WC #	A - HCL									
Email		Project #	B - NaOH									
Plant McIntosh - Ash Pond 1		68027747	C - Zn-Acetate									
Site		SSOW#	D - Nitric Acid									
			E - NaHSO4									
			F - MeOH									
			G - Amchlor									
			H - Ascorbic Acid									
			I - Ice									
			J - DI Water									
			K - EDTA									
			L - EDA									
			Z - other (specify)									
			Other:									
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewat, BT=tissue, A=air)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PreSep_0 Radium-228	9315_Ra226/PreSep_21 Radium-226	Ra226Ra228_GFP/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
MGWA-10 (680-219187-1)	8/2/22	11:20 Eastern	Water	Water	X	X	X	X	X	X	2	
MGWA-11 (680-219187-2)	8/2/22	14:05 Eastern	Water	Water	X	X	X	X	X	X	2	
EB-03 (680-219187-3)	8/2/22	13:50 Eastern	Water	Water	X	X	X	X	X	X	2	
MGWA-5 (680-219187-4)	8/2/22	15:50 Eastern	Water	Water	X	X	X	X	X	X	2	
MGWA-6 (680-219187-5)	8/2/22	12:55 Eastern	Water	Water	X	X	X	X	X	X	2	
MGWA-6A (680-219187-6)	8/2/22	14:20 Eastern	Water	Water	X	X	X	X	X	X	2	
MGWC-12 (680-219187-7)	8/2/22	16:05 Eastern	Water	Water	X	X	X	X	X	X	2	
FB-01 (680-219187-8)	8/2/22	13:10 Eastern	Water	Water	X	X	X	X	X	X	2	
FD-01 (680-219187-9)	8/2/22	Eastern	Water	Water	X	X	X	X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

**Possible Hazard Identification**  
 Unconfirmed  
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: 8/2/22 16:05 Company: FED-EX  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Custody Seals Intact: \_\_\_\_\_ Custody Seal No. \_\_\_\_\_  
 Δ Yes Δ No

Received by: *P. Fuller* Date/Time: 8/2/22 06:55 Company: *ETAJTC*  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Special Instructions/QC Requirements: \_\_\_\_\_  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

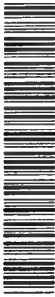
Method of Shipment: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks: \_\_\_\_\_

# Chain of Custody Record



Environment Testing  
 America



<b>Client Information (Sub Contract Lab)</b>		Lab PM Fuller, David	Carrier Tracking Note(s)	COC No: 680-703921.1
Client Contact Shipping/Receiving		E-Mail David.Fuller@eurofins.com	State of Origin Georgia	Page Page 1 of 1
Company TestAmerica Laboratories, Inc.		Accreditations Required (See note) State - Georgia	Job # 680-219323-1	Preservation Codes: M - Hexane N - None O - ASN02 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify) Other:
Address 13715 Rider Trail North,		Due Date Requested: 8/18/2022	Analysis Requested	
City Earth City		TAT Requested (days):	Total Number of Containers	
State, Zip MO, 63045		PO #	Field Filtered Sample (Yes or No)	
Phone 314-298-8566(Tel) 314-298-8757(Fax)		WO #	Perform MS/MSD (Yes or No)	
Email		Project # 68027747	9320_Ra228/PreSep_0 Radium-228	
Plant Name Plant McIntosh - Ash Pond 1		SSOW#	9315_Ra226/PreSep_21 Radium-226	
Site		Sample Date	Radium-228	
Sample Identification - Client ID (Lab ID)		Sample Time	Radium-228	
FD-02 (680-219323-1)	Sample Type (C=Comp, G=grab)	8/4/22 Eastern	Radium-228	
FB-02 (680-219323-2)	Matrix (W=water, S=solid, O=waste/oh, BT=issue, AS=ur)	8/3/22 Eastern	Radium-228	
MGWC-1 (680-219323-3)	Water	8/3/22 Eastern	Radium-228	
MGWC-8 (680-219323-4)	Water	8/4/22 Eastern	Radium-228	
MGWC-2 (680-219323-5)	Water	8/4/22 Eastern	Radium-228	
MGWC-3 (680-219323-6)	Water	8/3/22 Eastern	Radium-228	
MGWC-7 (680-219323-7)	Water	8/3/22 Eastern	Radium-228	
EB-04 (680-219323-8)	Water	8/4/22 Eastern	Radium-228	
Special Instructions/Note:				
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.				
<b>Possible Hazard Identification</b>				
Unconfirmed				
Deliverable Requested: I, II, III, IV, Other (specify)				
Primary Deliverable Rank: 2				
Special Instructions/QC Requirements:				
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Empty Kit Relinquished by:				
Relinquished by: <i>Sh Amunette</i> Date: <i>8/18</i> Time: <i>7:00</i> Company:				
Relinquished by: <b>FED EX</b> Date/Time: <b>AUG 09 2022 09:25</b> Company: <b>LABORATORY</b>				
Relinquished by: <i>LABORATORY</i> Date/Time: _____ Company: _____				
Custody Seals Intact: _____ Custody Seal No.: _____				
Cooler Temperature(s) °C and Other Remarks:				

# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-2

**Login Number: 219187**

**List Source: Eurofins Savannah**

**List Number: 1**

**Creator: Bissonnette, Ian**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-2

**Login Number: 219187**

**List Number: 2**

**Creator: Bohlmann, Jessica M**

**List Source: Eurofins St. Louis**

**List Creation: 08/05/22 11:47 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-2

**Login Number: 219323**

**List Source: Eurofins Savannah**

**List Number: 1**

**Creator: Padayao, Abigail**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219187-2

**Login Number: 219323**

**List Number: 2**

**Creator: Booker, Autumn R**

**List Source: Eurofins St. Louis**

**List Creation: 08/09/22 10:11 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**LEVEL 2A LABORATORY DATA VALIDATIONS**

**McIntosh Ash Pond 1**

**Annual Event**

**August 2022**



## **Georgia Power Company – McIntosh Ash Pond 1**

### **Quality Control Review of Analytical Data – August 2022**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins Environment Testing America, Savannah, Pittsburgh, and St. Louis for groundwater samples collected at McIntosh Ash Pond 1 between August 2, 2022 and August 4, 2022. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 680-219187-1 was revised three times for the lab to address sample mislabeling, correct errant data following reanalysis, and add missing QC information. SDG 680-219187-2 was revised twice for the lab to address sample mislabeling and add missing QC information.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 Code of Federal Regulations (CFR), Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III, and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

**Laboratory Precision:** Laboratory goals for precision were met.

**Field Precision:** Field goals for precision were met, except for total dissolved solids (TDS) and chloride on MGWA-5 (680-219187-4) and radium-226 on MGWC-2 (680-219323-5) as described in the qualifications section below.

**Accuracy:** Laboratory goals for accuracy were met, except for boron on several samples due to high continuing calibration verification (CCV) results on the sample, the associated method blank (MB), and/or the associated laboratory control sample (LCS) as described in the qualifications section below.

**Detection Limits:** Project goals for detection limits were met.

**Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** Holding time requirements were met, except for chloride, fluoride, and sulfate on EB-03 (680-219187-3), MGWA-6 (680-219187-5), and MGWA-6A (680-219187-6) and TDS on EB-03 (680-219187-3) and MGWA-6A (680-219187-6) as described in the qualifications section below.

## QUALIFICATIONS

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

**J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

**ND:** The analyte was not detected above the method detection limit

**H:** The analysis was performed outside the method holding time

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The

applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Samples MGWA-5 (680-219187-4) and FD-01 (680-219187-9) were qualified as estimated (J) for TDS and chloride as the relative percent differences (RPDs) exceeded QC criteria (63.4% and 33.3%, respectively, above the limit of 20).
- Samples MGWC-2 (680-219323-5) and FD-02 (680-219323-1) were qualified as estimated (J) for radium-226 as the RPD exceeded QC criteria (85.1%, above the limit of 20).
- Certain boron results on work orders 680-219187-1 and 680-219323-1 were qualified as estimated (J) due to the analyte being recovered above the acceptance range in the CCVs for the sample, the associated MB, and/or the associated LCS. Reference Table 2 for specific samples.
- Samples EB-03 (680-219187-3), MGWA-6 (680-219187-5), and MGWA-6A (680-219187-6) were qualified as analyzed past the method holding time (H) for chloride, fluoride, and sulfate. The samples were originally prepared within the holding time, but due to errant data caused by a mislabeling of containers at the lab, the samples had to be reanalyzed. The reanalysis results were more in line with the expectations based on sample type and/or historical results. The reanalysis data were reported.
- Samples EB-03 (680-219187-3) and MGWA-6A (680-219187-6) were qualified as analyzed past the method holding time (H) for TDS. The samples were originally prepared within the holding time, but due to errant data caused by a mislabeling of containers at the lab, the samples had to be reanalyzed. The reanalysis results were more in line with the expectations based on sample type and/or historical results. The reanalysis data were reported.
- Certain antimony and radium-228 results on work orders 680-219187-1 and 680-219323-2 were qualified as non-detect (ND) due to the analytes being detected at similar concentrations in an associated blank sample. As shown in Table 2, when the original sample result was below the reporting limit (RL), the new method detection limit (MDL) or minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process; when the original sample result was above the RL, the new RL was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh Ash Pond 1 sampled between August 2, 2022 and August 4, 2022 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## **REFERENCES**

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

Plant McIntosh Ash Pond 1  
2022 Annual Groundwater Monitoring and Corrective Action Report

TABLE 1

Georgia Power Company – McIntosh Ash Pond 1

Sample Summary Table – August 2022

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
219187-1	MGWA-10	8/2/2022	680-219187-1	WG		X	X	X	
219187-2	MGWA-10	8/2/2022	680-219187-1	WG					X
219187-1	MGWA-11	8/2/2022	680-219187-2	WG		X	X	X	
219187-2	MGWA-11	8/2/2022	680-219187-2	WG					X
219187-1	EB-03	8/2/2022	680-219187-3	WQ	EB	X	X	X	
219187-2	EB-03	8/2/2022	680-219187-3	WQ	EB				X
219187-1	MGWA-5	8/2/2022	680-219187-4	WG		X	X	X	
219187-2	MGWA-5	8/2/2022	680-219187-4	WG					X
219187-1	MGWA-6	8/2/2022	680-219187-5	WG		X	X	X	
219187-2	MGWA-6	8/2/2022	680-219187-5	WG					X
219187-1	MGWA-6A	8/2/2022	680-219187-6	WG		X	X	X	
219187-2	MGWA-6A	8/2/2022	680-219187-6	WG					X
219187-1	MGWC-12	8/2/2022	680-219187-7	WG		X	X	X	
219187-2	MGWC-12	8/2/2022	680-219187-7	WG					X
219187-1	FB-01	8/2/2022	680-219187-8	WQ	FB	X	X	X	
219187-2	FB-01	8/2/2022	680-219187-8	WQ	FB				X
219187-1	FD-01	8/2/2022	680-219187-9	WG	FD (MGWA-5)	X	X	X	
219187-2	FD-01	8/2/2022	680-219187-9	WG	FD (MGWA-5)				X
219187-1	FD-02	8/4/2022	680-219323-1	WG	FD (MGWC-2)	X	X	X	
219187-2	FD-02	8/4/2022	680-219323-1	WG	FD (MGWC-2)				X
219187-1	FB-02	8/3/2022	680-219323-2	WQ	FB	X	X	X	
219187-2	FB-02	8/3/2022	680-219323-2	WQ	FB				X
219187-1	MGWC-1	8/3/2022	680-219323-3	WG		X	X	X	
219187-2	MGWC-1	8/3/2022	680-219323-3	WG					X
219187-1	MGWC-8	8/4/2022	680-219323-4	WG		X	X	X	
219187-2	MGWC-8	8/4/2022	680-219323-4	WG					X

Abbreviations:  
 EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 WG – Groundwater  
 QC – Quality Control  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

Plant McIntosh Ash Pond 1  
 2022 Annual Groundwater Monitoring and Corrective Action Report

TABLE 1 (continued)  
 Georgia Power Company – McIntosh Ash Pond 1  
 Sample Summary Table – August 2022

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
219187-1	MGWC-2	8/4/2022	680-219323-5	WG		X	X	X	
219187-2	MGWC-2	8/4/2022	680-219323-5	WG					X
219187-1	MGWC-3	8/3/2022	680-219323-6	WG		X	X	X	
219187-2	MGWC-3	8/3/2022	680-219323-6	WG					X
219187-1	MGWC-7	8/3/2022	680-219323-7	WG		X	X	X	
219187-2	MGWC-7	8/3/2022	680-219323-7	WG					X
219187-1	EB-04	8/4/2022	680-219323-8	WQ	EB	X	X	X	
219187-2	EB-04	8/4/2022	680-219323-8	WQ	EB				X

Abbreviations:  
 EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 WG – Groundwater  
 QC – Quality Control  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

Plant McIntosh Ash Pond 1  
2022 Annual Groundwater Monitoring and Corrective Action Report

TABLE 2  
Georgia Power Company – McIntosh Ash Pond 1  
Qualifier Summary Table – August 2022

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
219187-1	MGWC-12	Boron			J	High CCV in MB and LCS
219187-1	FB-01	Boron			J	High CCV in MB and LCS
219187-1	FD-01	Boron			J	High CCV in sample, MB, and LCS
219187-1	FD-02	Boron			J	High CCV in MB and LCS
219187-1	FB-02	Boron			J	High CCV in MB and LCS
219187-1	MGWC-1	Boron			J	High CCV in MB and LCS
219187-1	MGWC-8	Boron			J	High CCV in MB and LCS
219187-1	MGWC-2	Boron			J	High CCV in MB and LCS
219187-1	MGWC-3	Boron			J	High CCV in MB and LCS
219187-1	MGWC-7	Boron			J	High CCV in MB and LCS
219187-1	EB-03	Chloride			H	Lab reanalysis past holding time
219187-1	EB-03	Fluoride			H	Lab reanalysis past holding time
219187-1	EB-03	Sulfate			H	Lab reanalysis past holding time
219187-1	EB-03	TDS			H	Lab reanalysis past holding time
219187-1	MGWA-6	Chloride			H	Lab reanalysis past holding time
219187-1	MGWA-6	Fluoride			H	Lab reanalysis past holding time
219187-1	MGWA-6	Sulfate			H	Lab reanalysis past holding time
219187-1	MGWA-6A	Chloride			H	Lab reanalysis past holding time
219187-1	MGWA-6A	Fluoride			H	Lab reanalysis past holding time
219187-1	MGWA-6A	Sulfate			H	Lab reanalysis past holding time
219187-1	MGWA-6A	TDS			H	Lab reanalysis past holding time
219187-1	MGWA-5	TDS			J	RPD exceeds field goal
219187-1	FD-01	TDS			J	RPD exceeds field goal
219187-1	MGWA-5	Chloride			J	RPD exceeds field goal
219187-1	FD-01	Chloride			J	RPD exceeds field goal

Abbreviations:

CCV – Continuing Calibration Verification  
LCS – Laboratory Control Sample  
MB – Laboratory Method Blank  
MDC – Minimum Detectable Concentration  
MS/MSD – Matrix Spike / Matrix Spike Duplicate  
MDL – Method Detection Limit  
RL – Reporting Limit  
RPD – Relative Percent Difference  
SDG – Sample Delivery Group  
TDS – Total Dissolved Solids

Qualifiers:

H – Missed Holding Time  
J – Estimated Result  
ND – Non-Detect Result

Plant McIntosh Ash Pond 1  
 2022 Annual Groundwater Monitoring and Corrective Action Report

TABLE 2 (continued)

Georgia Power Company – McIntosh Ash Pond 1

Qualifier Summary Table – August 2022

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
219187-2	MGWC-2	Radium-226			J	RPD exceeds field goal
219187-2	FD-02	Radium-226			J	RPD exceeds field goal
219187-1	MGWC-12	Antimony		0.0015	ND	Blank detection
219187-1	FB-01	Antimony		0.0019	ND	Blank detection
219187-2	MGWC-1	Radium-228		0.799	ND	Blank detection
219187-2	MGWC-8	Radium-228		0.703	ND	Blank detection
219187-2	MGWC-2	Radium-228		0.526	ND	Blank detection
219187-2	MGWC-3	Radium-228	1.2		ND	Blank detection

Abbreviations:

CCV – Continuing Calibration Verification  
 LCS – Laboratory Control Sample  
 MB – Laboratory Method Blank  
 MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids

Qualifiers:

H – Missed Holding Time  
 J – Estimated Result  
 ND – Non-Detect Result



## ANALYTICAL REPORT

Eurofins Savannah  
5102 LaRoche Avenue  
Savannah, GA 31404  
Tel: (912)354-7858

Laboratory Job ID: 680-219320-1  
Client Project/Site: Plant McIntosh - Ash Pond 1  
Revision: 1

For:  
Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Attn: Kristen N Jurinko



Authorized for release by:  
9/28/2022 5:04:19 PM

David Fuller, Project Manager  
(770)344-8986  
[David.Fuller@et.eurofinsus.com](mailto:David.Fuller@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Definitions/Glossary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Sample Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-219320-1	MGWC-20	Water	08/04/22 13:35	08/05/22 09:20
680-219320-2	MGWC-23	Water	08/04/22 12:45	08/05/22 09:20

1

2

3

4

5

6

7

8

9

10

11

12

# Case Narrative

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

---

**Job ID: 680-219320-1**

---

**Laboratory: Eurofins Savannah**

## Narrative

---

### Job Narrative 680-219320-1

#### Revision 1

The report being provided is a revision of the original report sent on 8/31/2022. The report (revision 1) is being revised in order to report appropriate batch QC for these methods and add appropriate NELAP certification information for the Savannah & Pittsburgh laboratories.

#### Receipt

The samples were received on 8/5/2022 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C

#### Metals

Method 6020B: The batch QC for the sample below was reported from a run where the closing CCV for Boron was 111%. The method criteria is 110%: MGWC-23 (680-219320-2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Client Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

**Client Sample ID: MGWC-20**

**Lab Sample ID: 680-219320-1**

Date Collected: 08/04/22 13:35

Matrix: Water

Date Received: 08/05/22 09:20

**Method: 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00025	J	0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 19:54	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.011		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 13:18	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.18				SU			08/04/22 13:35	1

**Client Sample ID: MGWC-23**

**Lab Sample ID: 680-219320-2**

Date Collected: 08/04/22 12:45

Matrix: Water

Date Received: 08/05/22 09:20

**Method: 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 19:57	1

**Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.087		0.080	0.060	mg/L		08/19/22 12:45	08/26/22 10:10	1
Lithium	0.0044	J	0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 13:29	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.32				SU			08/04/22 12:45	1

# QC Sample Results

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

## Method: 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 680-734604/1-A**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734604**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/08/22 05:21	08/08/22 19:16	1

**Lab Sample ID: LCS 680-734604/2-A**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 734604**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	0.0500	0.0517		mg/L		103	80 - 120

**Lab Sample ID: 410-93040-G-1-E MS**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Matrix Spike**  
**Prep Type: Dissolved**  
**Prep Batch: 734604**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	<0.00022		0.0500	0.0586		mg/L		117	75 - 125

**Lab Sample ID: 410-93040-G-1-F MSD**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Dissolved**  
**Prep Batch: 734604**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	<0.00022		0.0500	0.0585		mg/L		117	75 - 125	0	20

**Lab Sample ID: 410-93040-A-1-B DU**  
**Matrix: Water**  
**Analysis Batch: 734891**

**Client Sample ID: Duplicate**  
**Prep Type: Dissolved**  
**Prep Batch: 734604**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cobalt	<0.00022		<0.00022		mg/L		NC	20

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-409372/1-A**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.00083		0.0050	0.00083	mg/L		08/19/22 12:45	08/20/22 11:55	1

**Lab Sample ID: MB 180-409372/1-A**  
**Matrix: Water**  
**Analysis Batch: 410047**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		08/19/22 12:45	08/23/22 12:51	1

# QC Sample Results

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 180-409372/2-A**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.500	0.507		mg/L		101	80 - 120

**Lab Sample ID: LCS 180-409372/2-A**  
**Matrix: Water**  
**Analysis Batch: 410047**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.25	1.31		mg/L		105	80 - 120

**Lab Sample ID: 180-142545-J-1-B MS**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.3	^+	1.25	2.64	^+	mg/L		109	75 - 125
Lithium	0.039		0.500	0.502		mg/L		93	75 - 125

**Lab Sample ID: 180-142545-J-1-C MSD**  
**Matrix: Water**  
**Analysis Batch: 409603**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 409372**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.3	^+	1.25	2.61	^+	mg/L		106	75 - 125	1	20
Lithium	0.039		0.500	0.511		mg/L		94	75 - 125	2	20

# QC Association Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

## Metals

### Prep Batch: 409372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219320-1	MGWC-20	Total Recoverable	Water	3005A	
680-219320-2	MGWC-23	Total Recoverable	Water	3005A	
MB 180-409372/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-409372/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-142545-J-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
180-142545-J-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Analysis Batch: 409603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219320-1	MGWC-20	Total Recoverable	Water	EPA 6020B	409372
680-219320-2	MGWC-23	Total Recoverable	Water	EPA 6020B	409372
MB 180-409372/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	409372
LCS 180-409372/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	409372
180-142545-J-1-B MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	409372
180-142545-J-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	409372

### Analysis Batch: 410047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-409372/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	409372
LCS 180-409372/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	409372

### Analysis Batch: 410429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219320-2	MGWC-23	Total Recoverable	Water	EPA 6020B	409372

### Prep Batch: 734604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219320-1	MGWC-20	Total Recoverable	Water	3005A	
680-219320-2	MGWC-23	Total Recoverable	Water	3005A	
MB 680-734604/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-734604/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
410-93040-G-1-E MS	Matrix Spike	Dissolved	Water	3005A	
410-93040-G-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
410-93040-A-1-B DU	Duplicate	Dissolved	Water	3005A	

### Analysis Batch: 734891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219320-1	MGWC-20	Total Recoverable	Water	6020B	734604
680-219320-2	MGWC-23	Total Recoverable	Water	6020B	734604
MB 680-734604/1-A	Method Blank	Total Recoverable	Water	6020B	734604
LCS 680-734604/2-A	Lab Control Sample	Total Recoverable	Water	6020B	734604
410-93040-G-1-E MS	Matrix Spike	Dissolved	Water	6020B	734604
410-93040-G-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020B	734604
410-93040-A-1-B DU	Duplicate	Dissolved	Water	6020B	734604

## Field Service / Mobile Lab

### Analysis Batch: 735456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-219320-1	MGWC-20	Total/NA	Water	Field Sampling	
680-219320-2	MGWC-23	Total/NA	Water	Field Sampling	

Eurofins Savannah



# Lab Chronicle

Client: Southern Company  
 Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

**Client Sample ID: MGWC-20**

**Lab Sample ID: 680-219320-1**

Date Collected: 08/04/22 13:35

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 19:54	BWR	EET SAV
Instrument ID: ICPMSD										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 13:18	RSK	EET PIT
Instrument ID: A										
Total/NA	Analysis	Field Sampling		1			735456	08/04/22 13:35	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MGWC-23**

**Lab Sample ID: 680-219320-2**

Date Collected: 08/04/22 12:45

Matrix: Water

Date Received: 08/05/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	250 mL	734604	08/08/22 05:21	RR	EET SAV
Total Recoverable	Analysis	6020B		1			734891	08/08/22 19:57	BWR	EET SAV
Instrument ID: ICPMSD										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			409603	08/20/22 13:29	RSK	EET PIT
Instrument ID: A										
Total Recoverable	Prep	3005A			25 mL	25 mL	409372	08/19/22 12:45	NAF	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			410429	08/26/22 10:10	RSK	EET PIT
Instrument ID: DORY										
Total/NA	Analysis	Field Sampling		1			735456	08/04/22 12:45	T1C	EET SAV
Instrument ID: NOEQUIP										

**Laboratory References:**

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Accreditation/Certification Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

## Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87052	07-30-23
Georgia	State	E87052	06-30-23

## Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	PA 02-00416	08-31-22
Pennsylvania	NELAP	02-00416	08-31-22



# Method Summary

Client: Southern Company  
Project/Site: Plant McIntosh - Ash Pond 1

Job ID: 680-219320-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET SAV
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
Field Sampling	Field Sampling	EPA	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV

#### Protocol References:

EPA = US Environmental Protection Agency

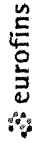
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Chain of Custody Record



2400 Coche Avenue  
Savannah GA 31404  
Phone (912) 354-7858 Fax (912) 352-0165

<b>Client Information</b> Client Contact: <i>A. Schmitt</i> SCS Contacts: <i>770-594-5448</i> Company: <i>Fuller David</i> GA Power Address: 241 Ralph McGill Blvd SE City: Atlanta State, Zip: GA, 30308 Phone: 404-506-7116(Tel) Email: 68027747 Project Name: Plant McIntosh - Ash Pond 1 Site: Georgia		Lab P.M.: Fuller David E-Mail: david.fuller@et.eurofinsus.com Carrier Tracking No(s): CCC No: Page: Job #:	
Due Date Requested TAT Requested (days)		Analysis Requested	
Sample Identification MGWC-20 MGWC-23		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Cobalt, Lithium only <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Boron, Cobalt, Lithium only <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Sample Date (mm/dd/yy)	Sample Time (hh:mm)	Sample Type (C=comp, G=grab)	Preservation Code:
08/04/20	1335	G	WG
08/04/20	1245	G	WG
Barcode: 680-219320 Chain of Custody			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV Other (specify)			
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <i>Fuller David</i> Date: 08/04/20 Company: <i>Acc</i> Relinquished by: <i>Fuller David</i> Date: 08/15/22 Company: <i>Acc</i> Relinquished by: <i>Fuller David</i> Date: 08/05/20 Company: <i>Acc</i> Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No. 12111			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements	
Total Number of Containers: <input checked="" type="checkbox"/>		Special Instructions/Note: pH= 6.18 pH= 7.32	
Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 L - EDTA Z - other (specify)			

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Part # 159469-434 MTW EXP 01/23

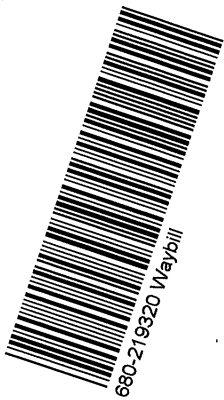
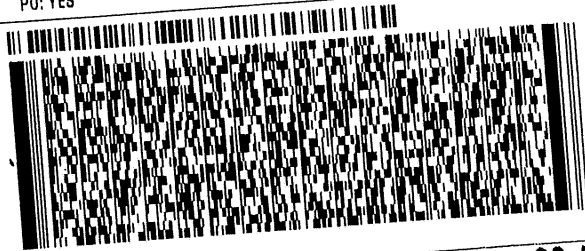
ORIGIN ID: SAVA (912) 354-7858  
SHIPPING  
EUROFINS/TESTAMERICA  
5102 LA ROUCHE AVE  
SAVANNAH, GA 31404  
UNITED STATES US

SHIP DATE: 08AUG22  
ACTWGT: 5.00 LB MAN  
CAD: 0801261/CAFE3614

BILL SENDER

TO SHIPPING/RECEIVING  
EUROFINS ENVIRONMENT TESTING NORTHE  
301 ALPHA DRIVE  
RIDC PARK  
PITTSBURGH PA 15238  
REF: S680-138195

(412) 963-7058  
PO: YES



TRK# 1328 9416 1400  
0201

TUE - 09 AUG 10:30A  
PRIORITY OVERNIGHT

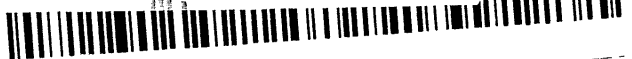
## XN AGCA

15238  
PA-US PIT

Uncorrected temp 3.3 °C  
Thermometer ID 8

CF -0.7 Initials [Signature]

PT-WI-SR-001 effective 11/8/18



Eurofins Savannah

5102 LaRoche Avenue  
Savannah, GA 31404  
Phone 912-354-7858 Fax 912-352-0165

Chain of Custody Record

Environment Testing  
America

Client Information (Sub Contract Lab)  
Client Contact: Lab PM Fuller, David  
Shipping/Receiving: E-Mail David Fuller@et.eurofinsus.com  
Company: Eurofins Environment Testing Northeast, State - Georgia

Address: 301 Alpha Drive, RIDC Park, Pittsborough, PA, 15238  
Phone: 412-963-7058(Tel) 412-963-2468(Fax)  
Project Name: Plant McIntosh - Ash Pond 1  
Site: 68027747

Due Date Requested: 8/18/2022  
TAT Requested (days):  
PO #:  
WO #:  
Project #: 68027747  
SSOW#:

Table with columns: Sample ID, Sample Date, Sample Time, Sample Type, Matrix, Field Filtered Sample, Perform MS/MSD, 6020B/3005A Lithium, 6020B/3005A Boron & Lithium, Total Number of Containers, Special Instructions/Note.

Note: Since laboratory accreditations are subject to change... Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories...

Possible Hazard Identification  
Unconfirmed  
Deliverable Requested 1, II, III, IV, Other (specify)

Empty Kit Relinquished by  
Relinquished by: [Signature]  
Relinquished by: [Signature]  
Relinquished by: [Signature]  
Custody Seals Intact: Yes No  
Custody Seal No

Received by: [Signature]  
Received by: [Signature]  
Received by: [Signature]  
Cooler Temperature(s) °C and Other Remarks

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
Return To Client  
Disposal By Lab  
Archive For: Months

# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219320-1

**Login Number: 219320**

**List Source: Eurofins Savannah**

**List Number: 1**

**Creator: Padayao, Abigail**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-219320-1

**Login Number: 219320**

**List Number: 2**

**Creator: Watson, Debbie**

**List Source: Eurofins Pittsburgh**

**List Creation: 08/09/22 07:07 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	





**LEVEL 2A LABORATORY DATA VALIDATIONS**

**McIntosh Ash Pond 1  
Characterization Event  
August 2022**

# **Georgia Power Company – McIntosh Ash Pond 1**

## **Quality Control Review of Analytical Data – August 2022**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins Environment Testing America, Savannah and Pittsburgh for groundwater samples collected at McIntosh AP1 August 4, 2022. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample location, analytical parameter, QC samples, sampling date, and laboratory sample delivery group (SDG) designation is summarized in Table 1 of this Appendix.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the characterization samples were analyzed for select detection monitoring constituents listed in 40 CFR, Part 257, Appendix III, and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. The test method included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (laboratory blanks). Sample receipt conditions, holding times, and chains of custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

**Laboratory Precision:** Laboratory goals for precision were met.

**Field Precision:** Field goals for precision were met.

**Accuracy:** Laboratory goals for accuracy were met.

**Detection Limits:** Project goals for detection limits were met.

**Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** Holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the resample collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

**J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

**ND:** The analyte was not detected above the method detection limit

The data generated as part of this supplemental event met the QC criteria established in the analytical method and data validation guidelines. No sample qualifications were required.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh AP1 sampled August 4, 2022 in accordance with the analytical method, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## REFERENCES

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1

Georgia Power Company – McIntosh AP1

Sample Summary Table – August 2022

						Analyses
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (6020B)
219320	MGWC-20	8/4/2022	680-219320-1	WG		X
219320	MGWC-23	8/4/2022	680-219320-2	WG		X

Abbreviations:  
 WG – Groundwater  
 QC – Quality Control  
 SDG – Sample Delivery Group

# Low-Flow Test Report:

Test Date / Time: 8/2/2022 2:45:37 PM

Project: Plant McIntosh AP-1

Operator Name: Jordan Berisford

<b>Location Name: MGWA-5</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 53 ft</b> <b>Total Depth: 63.09 ft</b> <b>Initial Depth to Water: 26 ft</b>	<b>Pump Type: Peristaltic Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 57 ft</b> <b>Estimated Total Volume Pumped: 11.4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 175 ml/min</b> <b>Final Draw Down: 16.8 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
---	---	--

## Test Notes:

Sunny, sample time-1550, FD-01 here

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 10	+/- 0.3	
8/2/2022 2:45 PM	00:00	7.70 pH	45.69 °C	0.36 µS/cm	5.76 mg/L	0.99 NTU	70.8 mV	26.00 ft	175.00 ml/min
8/2/2022 2:50 PM	05:00	7.67 pH	28.30 °C	200.09 µS/cm	5.47 mg/L	0.68 NTU	45.7 mV	26.80 ft	175.00 ml/min
8/2/2022 2:55 PM	10:00	7.43 pH	25.18 °C	212.93 µS/cm	2.34 mg/L	1.94 NTU	35.4 mV	26.80 ft	175.00 ml/min
8/2/2022 3:00 PM	15:00	7.27 pH	25.06 °C	215.85 µS/cm	0.88 mg/L	1.23 NTU	-47.5 mV	27.00 ft	175.00 ml/min
8/2/2022 3:05 PM	20:00	7.28 pH	25.00 °C	216.37 µS/cm	0.42 mg/L	0.69 NTU	-85.4 mV	27.20 ft	175.00 ml/min
8/2/2022 3:10 PM	25:00	7.35 pH	24.52 °C	217.54 µS/cm	0.25 mg/L	0.89 NTU	-98.0 mV	27.40 ft	175.00 ml/min
8/2/2022 3:15 PM	30:00	7.37 pH	24.43 °C	218.79 µS/cm	0.22 mg/L	1.16 NTU	-104.8 mV	27.40 ft	175.00 ml/min
8/2/2022 3:20 PM	35:00	7.39 pH	24.37 °C	218.37 µS/cm	0.15 mg/L	1.07 NTU	-109.6 mV	27.40 ft	175.00 ml/min
8/2/2022 3:25 PM	40:00	7.41 pH	24.64 °C	217.46 µS/cm	0.13 mg/L	0.69 NTU	-111.9 mV	27.40 ft	175.00 ml/min
8/2/2022 3:30 PM	45:00	8.14 pH	28.97 °C	0.31 µS/cm	7.90 mg/L	1.05 NTU	65.1 mV	27.40 ft	175.00 ml/min
8/2/2022 3:35 PM	50:00	7.39 pH	25.10 °C	214.32 µS/cm	0.17 mg/L	0.93 NTU	-93.4 mV	27.40 ft	175.00 ml/min
8/2/2022 3:40 PM	55:00	7.41 pH	24.71 °C	214.25 µS/cm	0.09 mg/L	0.87 NTU	-109.0 mV	27.40 ft	175.00 ml/min
8/2/2022 3:45 PM	01:00:00	7.43 pH	24.70 °C	214.82 µS/cm	0.08 mg/L	1.02 NTU	-111.2 mV	27.40 ft	175.00 ml/min
8/2/2022 3:50 PM	01:05:00	7.45 pH	24.38 °C	213.50 µS/cm	0.08 mg/L	1.17 NTU	-108.3 mV	27.40 ft	175.00 ml/min

# Low-Flow Test Report:

Test Date / Time: 8/2/2022 10:44:56 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWA-6</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 31.9 ft</b> <b>Total Depth: 41.93 ft</b> <b>Initial Depth to Water: 24.83 ft</b>	<b>Pump Type: Peri Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 34.9 ft</b> <b>Estimated Total Volume Pumped: 20 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 4 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
--	---	--

## Test Notes:

Sample time 1255. Sunny 90. Fb-01 here at 1310.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/2/2022 10:44 AM	00:00	7.09 pH	24.44 °C	473.97 µS/cm	1.80 mg/L	61.00 NTU	51.9 mV	24.83 ft	150.00 ml/min
8/2/2022 10:49 AM	05:00	7.14 pH	24.02 °C	473.74 µS/cm	1.58 mg/L	54.00 NTU	51.8 mV	25.10 ft	150.00 ml/min
8/2/2022 10:54 AM	10:00	7.13 pH	23.82 °C	471.67 µS/cm	1.39 mg/L	51.00 NTU	40.9 mV	25.20 ft	150.00 ml/min
8/2/2022 10:59 AM	15:00	7.11 pH	23.75 °C	473.89 µS/cm	1.23 mg/L	32.00 NTU	38.2 mV	25.20 ft	150.00 ml/min
8/2/2022 11:04 AM	20:00	7.11 pH	23.94 °C	471.42 µS/cm	1.12 mg/L	30.00 NTU	43.6 mV	25.20 ft	150.00 ml/min
8/2/2022 11:09 AM	25:00	7.13 pH	23.97 °C	472.86 µS/cm	1.51 mg/L	24.00 NTU	58.2 mV	25.20 ft	150.00 ml/min
8/2/2022 11:14 AM	30:00	7.12 pH	24.03 °C	470.76 µS/cm	1.41 mg/L	15.90 NTU	48.9 mV	25.20 ft	150.00 ml/min
8/2/2022 11:19 AM	35:00	7.11 pH	24.15 °C	472.87 µS/cm	1.04 mg/L	22.00 NTU	54.9 mV	25.20 ft	150.00 ml/min
8/2/2022 11:24 AM	40:00	7.10 pH	24.42 °C	471.34 µS/cm	0.79 mg/L	21.00 NTU	43.1 mV	25.20 ft	150.00 ml/min
8/2/2022 11:29 AM	44:06	7.09 pH	24.06 °C	473.23 µS/cm	0.70 mg/L	18.40 NTU	36.2 mV	25.20 ft	150.00 ml/min
8/2/2022 11:34 AM	49:06	7.11 pH	24.01 °C	474.75 µS/cm	1.30 mg/L	17.30 NTU	52.2 mV	25.20 ft	150.00 ml/min
8/2/2022 11:39 AM	54:06	7.11 pH	23.94 °C	474.58 µS/cm	1.25 mg/L	16.30 NTU	56.1 mV	25.20 ft	150.00 ml/min
8/2/2022 11:44 AM	59:06	7.10 pH	23.94 °C	475.51 µS/cm	0.81 mg/L	15.90 NTU	47.9 mV	25.20 ft	150.00 ml/min
8/2/2022 11:49 AM	01:04:06	7.10 pH	25.01 °C	474.90 µS/cm	0.71 mg/L	15.80 NTU	37.3 mV	25.20 ft	150.00 ml/min
8/2/2022 11:54 AM	01:09:06	7.12 pH	25.69 °C	474.89 µS/cm	1.18 mg/L	15.70 NTU	51.0 mV	25.20 ft	150.00 ml/min

8/2/2022 11:59 AM	01:14:06	7.11 pH	25.79 °C	472.86 µS/cm	0.86 mg/L	15.60 NTU	38.8 mV	25.20 ft	150.00 ml/min
8/2/2022 12:04 PM	01:19:06	7.12 pH	25.99 °C	472.46 µS/cm	1.36 mg/L	15.60 NTU	45.3 mV	25.20 ft	150.00 ml/min
8/2/2022 12:09 PM	01:24:06	7.11 pH	26.11 °C	473.86 µS/cm	0.86 mg/L	15.10 NTU	45.5 mV	25.20 ft	150.00 ml/min
8/2/2022 12:14 PM	01:29:06	7.11 pH	26.14 °C	471.35 µS/cm	0.78 mg/L	14.00 NTU	38.5 mV	25.20 ft	150.00 ml/min
8/2/2022 12:19 PM	01:34:06	7.11 pH	26.26 °C	474.90 µS/cm	0.76 mg/L	13.00 NTU	38.6 mV	25.20 ft	150.00 ml/min
8/2/2022 12:24 PM	01:39:06	7.11 pH	25.48 °C	473.23 µS/cm	0.70 mg/L	10.00 NTU	38.9 mV	25.20 ft	150.00 ml/min
8/2/2022 12:29 PM	01:44:06	7.11 pH	25.33 °C	473.35 µS/cm	0.58 mg/L	9.43 NTU	37.4 mV	25.20 ft	150.00 ml/min
8/2/2022 12:34 PM	01:49:06	7.11 pH	25.45 °C	473.09 µS/cm	0.53 mg/L	7.90 NTU	36.9 mV	25.20 ft	150.00 ml/min
8/2/2022 12:39 PM	01:54:06	7.09 pH	25.33 °C	473.58 µS/cm	0.48 mg/L	6.47 NTU	36.2 mV	25.20 ft	150.00 ml/min
8/2/2022 12:44 PM	01:59:06	7.09 pH	25.41 °C	472.84 µS/cm	0.46 mg/L	6.13 NTU	36.6 mV	25.20 ft	150.00 ml/min
8/2/2022 12:49 PM	02:04:06	7.10 pH	25.58 °C	476.62 µS/cm	0.46 mg/L	4.65 NTU	36.2 mV	25.20 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/2/2022 1:45:06 PM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWA-6A</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 29.7 ft</b> <b>Total Depth: 39.67 ft</b> <b>Initial Depth to Water: 23.47 ft</b>	<b>Pump Type: Peri Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 34 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 16 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
---	---	--

## Test Notes:

Sample time 1420. Sunny 90.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/2/2022 1:45 PM	00:00	7.32 pH	31.29 °C	412.14 µS/cm	2.32 mg/L	6.16 NTU	65.1 mV	23.47 ft	150.00 ml/min
8/2/2022 1:50 PM	05:00	7.31 pH	25.84 °C	432.35 µS/cm	2.23 mg/L	6.10 NTU	38.1 mV	24.70 ft	150.00 ml/min
8/2/2022 1:55 PM	10:00	7.31 pH	25.15 °C	437.18 µS/cm	2.09 mg/L	5.51 NTU	36.5 mV	24.80 ft	150.00 ml/min
8/2/2022 2:00 PM	15:00	7.31 pH	25.24 °C	434.72 µS/cm	1.92 mg/L	4.74 NTU	22.8 mV	24.80 ft	150.00 ml/min
8/2/2022 2:05 PM	20:00	7.29 pH	25.03 °C	436.26 µS/cm	1.86 mg/L	4.72 NTU	-1.1 mV	24.80 ft	150.00 ml/min
8/2/2022 2:10 PM	25:00	7.28 pH	24.99 °C	436.32 µS/cm	1.87 mg/L	3.98 NTU	-12.2 mV	24.80 ft	150.00 ml/min
8/2/2022 2:15 PM	30:00	7.27 pH	24.88 °C	438.55 µS/cm	1.91 mg/L	3.54 NTU	-19.2 mV	24.80 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------



# Low-Flow Test Report:

Test Date / Time: 8/2/2022 10:35:31 AM

Project: Plant McIntosh AP-1

Operator Name: Jordan Berisford

<b>Location Name: MGWA-10</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 43.09 ft</b> <b>Total Depth: 53.09 ft</b> <b>Initial Depth to Water: 20.24 ft</b>	<b>Pump Type: Peristaltic Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 48 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 30.7 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
--	--	--

## Test Notes:

Sunny, sample time-1120

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 10	+/- 0.3	
8/2/2022 10:35 AM	00:00	6.80 pH	36.62 °C	0.47 µS/cm	6.80 mg/L	21.00 NTU	211.0 mV	20.24 ft	100.00 ml/min
8/2/2022 10:40 AM	05:00	5.64 pH	29.11 °C	64.60 µS/cm	4.35 mg/L	11.00 NTU	68.8 mV	20.80 ft	100.00 ml/min
8/2/2022 10:45 AM	10:00	5.42 pH	26.65 °C	55.84 µS/cm	2.21 mg/L	8.03 NTU	61.3 mV	21.30 ft	100.00 ml/min
8/2/2022 10:50 AM	15:00	5.40 pH	26.38 °C	54.69 µS/cm	2.11 mg/L	4.72 NTU	62.6 mV	21.80 ft	100.00 ml/min
8/2/2022 10:55 AM	20:00	5.40 pH	26.24 °C	53.37 µS/cm	2.11 mg/L	3.65 NTU	62.2 mV	22.20 ft	100.00 ml/min
8/2/2022 11:00 AM	25:00	5.37 pH	26.23 °C	52.69 µS/cm	2.22 mg/L	2.99 NTU	63.9 mV	22.40 ft	100.00 ml/min
8/2/2022 11:05 AM	30:00	5.38 pH	26.29 °C	53.14 µS/cm	2.22 mg/L	3.81 NTU	64.4 mV	22.60 ft	100.00 ml/min
8/2/2022 11:10 AM	35:00	5.39 pH	26.33 °C	53.00 µS/cm	2.15 mg/L	4.19 NTU	65.6 mV	22.70 ft	100.00 ml/min
8/2/2022 11:15 AM	40:00	5.40 pH	26.47 °C	53.49 µS/cm	2.18 mg/L	1.95 NTU	65.6 mV	22.70 ft	100.00 ml/min
8/2/2022 11:20 AM	45:00	5.41 pH	26.66 °C	54.44 µS/cm	2.12 mg/L	1.77 NTU	65.9 mV	22.80 ft	100.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/2/2022 1:30:29 PM

Project: Plant McIntosh AP-1

Operator Name: Jordan Berisford

<b>Location Name: MGWA-11</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 45.81 ft</b> <b>Total Depth: 55.81 ft</b> <b>Initial Depth to Water: 23.95 ft</b>	<b>Pump Type: Peristaltic Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 50 ft</b> <b>Estimated Total Volume Pumped: 6.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 185 ml/min</b> <b>Final Draw Down: 5 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
--	---	--

## Test Notes:

Sunny, sample time-1405

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 10	+/- 0.3	
8/2/2022 1:30 PM	00:00	7.64 pH	42.38 °C	226.86 µS/cm	4.89 mg/L	3.85 NTU	61.1 mV	23.95 ft	185.00 ml/min
8/2/2022 1:35 PM	05:00	7.52 pH	26.74 °C	266.29 µS/cm	0.47 mg/L	2.22 NTU	61.4 mV	24.30 ft	185.00 ml/min
8/2/2022 1:40 PM	10:00	7.56 pH	25.80 °C	270.18 µS/cm	0.18 mg/L	1.76 NTU	31.4 mV	24.40 ft	185.00 ml/min
8/2/2022 1:45 PM	15:00	7.57 pH	25.40 °C	270.68 µS/cm	0.13 mg/L	1.26 NTU	10.7 mV	24.40 ft	185.00 ml/min
8/2/2022 1:50 PM	20:00	7.58 pH	25.26 °C	271.09 µS/cm	0.11 mg/L	1.47 NTU	-9.2 mV	24.40 ft	185.00 ml/min
8/2/2022 1:55 PM	25:00	7.56 pH	25.38 °C	281.74 µS/cm	0.10 mg/L	1.93 NTU	-11.6 mV	24.40 ft	185.00 ml/min
8/2/2022 2:00 PM	30:00	7.56 pH	25.47 °C	280.57 µS/cm	0.09 mg/L	1.10 NTU	-13.4 mV	24.40 ft	185.00 ml/min
8/2/2022 2:05 PM	35:00	7.57 pH	25.26 °C	280.40 µS/cm	0.08 mg/L	0.67 NTU	-16.4 mV	24.40 ft	185.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/3/2022 10:40:04 AM

Project: Plant McIntosh AP-1

Operator Name: Jordan Berisford

<b>Location Name: MGWC-1</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 46.08 ft</b> <b>Total Depth: 56.08 ft</b> <b>Initial Depth to Water: 40.09 ft</b>	<b>Pump Type: Portable bladder pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 51 ft</b> <b>Estimated Total Volume Pumped: 10.1 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 225 ml/min</b> <b>Final Draw Down: 13 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
---	--	--

## Test Notes:

Sunny, sample time-1125, FB-02 here at 1100

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 10	+/- 0.3	
8/3/2022 10:40 AM	00:00	7.16 pH	26.70 °C	522.15 µS/cm	3.08 mg/L	25.00 NTU	89.3 mV	40.09 ft	225.00 ml/min
8/3/2022 10:45 AM	05:00	7.20 pH	24.11 °C	505.07 µS/cm	1.33 mg/L	15.00 NTU	90.7 mV	40.60 ft	225.00 ml/min
8/3/2022 10:50 AM	10:00	7.21 pH	23.94 °C	533.03 µS/cm	0.93 mg/L	10.00 NTU	91.9 mV	41.00 ft	225.00 ml/min
8/3/2022 10:55 AM	15:00	7.21 pH	23.93 °C	541.89 µS/cm	0.79 mg/L	8.93 NTU	93.9 mV	41.10 ft	225.00 ml/min
8/3/2022 11:00 AM	20:00	7.22 pH	24.07 °C	546.02 µS/cm	0.82 mg/L	6.21 NTU	96.0 mV	41.20 ft	225.00 ml/min
8/3/2022 11:05 AM	25:00	7.22 pH	24.12 °C	560.52 µS/cm	0.74 mg/L	5.78 NTU	98.8 mV	41.20 ft	225.00 ml/min
8/3/2022 11:10 AM	30:00	7.22 pH	24.00 °C	548.67 µS/cm	0.66 mg/L	4.74 NTU	100.8 mV	41.20 ft	225.00 ml/min
8/3/2022 11:15 AM	35:00	7.22 pH	23.98 °C	552.12 µS/cm	0.59 mg/L	4.18 NTU	102.8 mV	41.20 ft	225.00 ml/min
8/3/2022 11:20 AM	40:00	7.23 pH	24.38 °C	567.52 µS/cm	0.53 mg/L	3.60 NTU	103.8 mV	41.20 ft	225.00 ml/min
8/3/2022 11:25 AM	45:00	7.23 pH	24.56 °C	568.39 µS/cm	0.47 mg/L	2.93 NTU	105.8 mV	41.20 ft	225.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/4/2022 8:50:47 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWC-2</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27 ft</b> <b>Total Depth: 37.36 ft</b> <b>Initial Depth to Water: 22.24 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 32 ft</b> <b>Estimated Total Volume Pumped: 35360 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min Final Draw Down: 0.48 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
--	---	--

## Test Notes:

Log 1/2. Aqua troll malfunction. See log 2/2.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/4/2022 8:50 AM	00:00	7.40 pH	21.73 °C	58,278 µS/cm	5.41 mg/L	0.58 NTU	58.3 mV	22.24 ft	200.00 ml/min
8/4/2022 8:55 AM	05:00	7.41 pH	21.74 °C	57,624 µS/cm	4.00 mg/L	0.42 NTU	30.5 mV	22.20 ft	200.00 ml/min
8/4/2022 9:00 AM	10:00	7.40 pH	21.53 °C	57,024 µS/cm	0.31 mg/L	0.48 NTU	23.4 mV	22.20 ft	200.00 ml/min
8/4/2022 9:05 AM	15:00	7.40 pH	21.44 °C	56,926 µS/cm	0.17 mg/L	0.41 NTU	19.2 mV	22.20 ft	200.00 ml/min
8/4/2022 9:10 AM	20:00	7.39 pH	21.68 °C	57,370 µS/cm	0.13 mg/L	0.39 NTU	11.3 mV	22.20 ft	200.00 ml/min
8/4/2022 9:15 AM	25:00	7.40 pH	21.77 °C	57,041 µS/cm	0.12 mg/L	0.27 NTU	6.3 mV	22.20 ft	200.00 ml/min
8/4/2022 9:20 AM	30:00	7.40 pH	21.92 °C	57,203 µS/cm	0.11 mg/L	0.93 NTU	3.3 mV	22.20 ft	200.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/4/2022 9:39:49 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWC-2</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27.36 ft</b> <b>Total Depth: 37.36 ft</b> <b>Initial Depth to Water: 22.24 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 32 ft</b> <b>Estimated Total Volume Pumped: 15 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 1 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
---	--	--

## Test Notes:

Log 2/2. Aqua troll recalibrated. Sunny 90s. Sample time 1000. FD-02 here.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/4/2022 9:39 AM	00:00	7.16 pH	23.57 °C	640.74 µS/cm	3.10 mg/L	1.57 NTU	176.7 mV	22.24 ft	200.00 ml/min
8/4/2022 9:44 AM	05:00	7.34 pH	22.62 °C	647.22 µS/cm	0.21 mg/L	1.33 NTU	28.8 mV	22.30 ft	200.00 ml/min
8/4/2022 9:49 AM	10:00	7.36 pH	22.38 °C	646.46 µS/cm	0.16 mg/L	0.33 NTU	9.1 mV	22.30 ft	200.00 ml/min
8/4/2022 9:54 AM	15:00	7.37 pH	22.20 °C	647.70 µS/cm	0.13 mg/L	0.29 NTU	4.3 mV	22.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/3/2022 12:14:42 PM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWC-3</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28 ft</b> <b>Total Depth: 38.74 ft</b> <b>Initial Depth to Water: 21.41 ft</b>	<b>Pump Type: Peri Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 33 ft</b> <b>Estimated Total Volume Pumped: 6.1 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 175 ml/min</b> <b>Final Draw Down: 9 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
--	--	--

## Test Notes:

Sample time 1255. Sunny 90s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/3/2022 12:14 PM	00:00	6.92 pH	22.30 °C	578.64 µS/cm	0.36 mg/L	8.79 NTU	53.3 mV	21.41 ft	175.00 ml/min
8/3/2022 12:19 PM	05:00	6.91 pH	22.32 °C	578.99 µS/cm	0.35 mg/L	8.12 NTU	44.9 mV	22.20 ft	175.00 ml/min
8/3/2022 12:24 PM	10:00	6.92 pH	22.40 °C	579.62 µS/cm	0.32 mg/L	5.87 NTU	33.2 mV	22.20 ft	175.00 ml/min
8/3/2022 12:29 PM	15:00	6.91 pH	22.42 °C	577.01 µS/cm	0.32 mg/L	3.61 NTU	30.4 mV	22.20 ft	175.00 ml/min
8/3/2022 12:34 PM	20:00	6.91 pH	22.58 °C	575.93 µS/cm	0.30 mg/L	3.35 NTU	26.3 mV	22.20 ft	175.00 ml/min
8/3/2022 12:39 PM	25:00	6.91 pH	22.67 °C	580.84 µS/cm	0.26 mg/L	2.78 NTU	24.0 mV	22.20 ft	175.00 ml/min
8/3/2022 12:44 PM	30:00	6.91 pH	22.71 °C	575.61 µS/cm	0.24 mg/L	2.25 NTU	23.1 mV	22.20 ft	175.00 ml/min
8/3/2022 12:49 PM	35:00	6.91 pH	22.75 °C	574.81 µS/cm	0.23 mg/L	2.16 NTU	22.6 mV	22.20 ft	175.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/3/2022 10:35:12 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWC-7</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 32.3 ft</b> <b>Total Depth: 42.29 ft</b> <b>Initial Depth to Water: 24.28 ft</b>	<b>Pump Type: Peri Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 37 ft</b> <b>Estimated Total Volume Pumped: 4.8 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 120 ml/min</b> <b>Final Draw Down: 7 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
--	--	--

## Test Notes:

Sample time 1120. Sunny 80s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/3/2022 10:35 AM	00:00	7.03 pH	23.41 °C	510.03 µS/cm	2.08 mg/L	1.10 NTU	120.7 mV	24.28 ft	120.00 ml/min
8/3/2022 10:40 AM	05:00	6.97 pH	24.24 °C	517.70 µS/cm	1.74 mg/L	3.97 NTU	97.6 mV	24.80 ft	120.00 ml/min
8/3/2022 10:45 AM	10:00	6.93 pH	24.47 °C	517.17 µS/cm	1.64 mg/L	4.21 NTU	81.2 mV	24.90 ft	120.00 ml/min
8/3/2022 10:50 AM	15:00	6.95 pH	24.44 °C	516.17 µS/cm	1.60 mg/L	4.89 NTU	70.0 mV	24.90 ft	120.00 ml/min
8/3/2022 10:55 AM	20:00	6.94 pH	24.29 °C	517.49 µS/cm	1.52 mg/L	5.97 NTU	63.9 mV	24.90 ft	120.00 ml/min
8/3/2022 11:00 AM	25:00	6.88 pH	24.41 °C	512.72 µS/cm	1.33 mg/L	5.08 NTU	52.4 mV	24.90 ft	120.00 ml/min
8/3/2022 11:05 AM	30:00	6.85 pH	24.24 °C	511.73 µS/cm	1.20 mg/L	4.49 NTU	45.3 mV	24.90 ft	120.00 ml/min
8/3/2022 11:10 AM	35:00	6.86 pH	24.30 °C	513.22 µS/cm	1.12 mg/L	4.64 NTU	42.6 mV	24.90 ft	120.00 ml/min
8/3/2022 11:15 AM	40:00	6.86 pH	23.93 °C	515.42 µS/cm	1.19 mg/L	4.65 NTU	53.7 mV	24.90 ft	120.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/4/2022 8:41:20 AM

Project: Plant McIntosh AP-1

Operator Name: Jordan Berisford

<b>Location Name: MGWC-8</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 42.56 ft</b> <b>Total Depth: 52.56 ft</b> <b>Initial Depth to Water: 34.42 ft</b>	<b>Pump Type: Portable bladder pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 46 ft</b> <b>Estimated Total Volume Pumped: 15.8 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 2.4 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
---	---	--

## Test Notes:

Sunny, sample time 1026.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 10	+/- 0.3	
8/4/2022 8:41 AM	00:00	6.39 pH	24.38 °C	11.54 µS/cm	8.43 mg/L	4.97 NTU	268.3 mV	34.42 ft	150.00 ml/min
8/4/2022 8:46 AM	05:00	6.99 pH	23.31 °C	605.15 µS/cm	3.26 mg/L	10.00 NTU	96.9 mV	34.60 ft	150.00 ml/min
8/4/2022 8:51 AM	10:00	7.37 pH	23.16 °C	660.23 µS/cm	1.19 mg/L	8.69 NTU	81.6 mV	34.60 ft	150.00 ml/min
8/4/2022 8:56 AM	15:00	7.43 pH	23.21 °C	673.75 µS/cm	0.77 mg/L	8.11 NTU	90.7 mV	34.60 ft	150.00 ml/min
8/4/2022 9:01 AM	20:00	7.41 pH	23.44 °C	676.68 µS/cm	0.59 mg/L	7.39 NTU	87.2 mV	34.60 ft	150.00 ml/min
8/4/2022 9:06 AM	25:00	6.61 pH	23.92 °C	474.21 µS/cm	3.55 mg/L	7.25 NTU	71.7 mV	34.60 ft	150.00 ml/min
8/4/2022 9:11 AM	30:00	6.11 pH	24.35 °C	423.90 µS/cm	5.56 mg/L	7.04 NTU	74.4 mV	34.60 ft	150.00 ml/min
8/4/2022 9:16 AM	35:00	5.90 pH	24.68 °C	432.50 µS/cm	4.99 mg/L	6.71 NTU	65.1 mV	34.60 ft	150.00 ml/min
8/4/2022 9:21 AM	40:00	5.71 pH	24.96 °C	429.93 µS/cm	3.55 mg/L	5.60 NTU	57.2 mV	34.60 ft	150.00 ml/min
8/4/2022 9:26 AM	45:00	5.59 pH	25.08 °C	439.19 µS/cm	2.21 mg/L	5.34 NTU	58.1 mV	34.60 ft	150.00 ml/min
8/4/2022 9:31 AM	50:00	5.54 pH	25.06 °C	455.03 µS/cm	1.35 mg/L	5.11 NTU	68.1 mV	34.60 ft	150.00 ml/min
8/4/2022 9:36 AM	55:00	5.54 pH	25.10 °C	479.38 µS/cm	0.84 mg/L	4.93 NTU	80.6 mV	34.60 ft	150.00 ml/min
8/4/2022 9:41 AM	01:00:00	5.61 pH	25.54 °C	528.22 µS/cm	0.49 mg/L	4.87 NTU	95.4 mV	34.60 ft	150.00 ml/min
8/4/2022 9:46 AM	01:05:00	5.72 pH	25.34 °C	565.48 µS/cm	0.29 mg/L	4.82 NTU	111.1 mV	34.60 ft	150.00 ml/min
8/4/2022 9:51 AM	01:10:00	5.81 pH	25.55 °C	592.94 µS/cm	0.21 mg/L	4.79 NTU	121.9 mV	34.60 ft	150.00 ml/min



8/4/2022 9:56 AM	01:15:00	5.89 pH	25.69 °C	613.83 µS/cm	0.18 mg/L	4.68 NTU	130.9 mV	34.60 ft	150.00 ml/min
8/4/2022 10:01 AM	01:20:00	6.00 pH	25.64 °C	630.97 µS/cm	0.15 mg/L	4.55 NTU	111.4 mV	34.60 ft	150.00 ml/min
8/4/2022 10:06 AM	01:25:00	6.12 pH	25.81 °C	649.33 µS/cm	0.14 mg/L	4.73 NTU	113.1 mV	34.60 ft	150.00 ml/min
8/4/2022 10:11 AM	01:30:00	6.27 pH	26.56 °C	666.32 µS/cm	0.12 mg/L	3.33 NTU	141.0 mV	34.60 ft	150.00 ml/min
8/4/2022 10:16 AM	01:35:00	6.40 pH	25.83 °C	665.18 µS/cm	0.24 mg/L	3.71 NTU	142.9 mV	34.60 ft	150.00 ml/min
8/4/2022 10:21 AM	01:40:00	6.48 pH	25.29 °C	679.51 µS/cm	0.19 mg/L	2.06 NTU	146.6 mV	34.60 ft	150.00 ml/min
8/4/2022 10:26 AM	01:45:00	6.50 pH	25.81 °C	689.71 µS/cm	0.13 mg/L	1.84 NTU	147.2 mV	34.60 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/2/2022 3:25:21 PM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWC-12</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 42 ft</b> <b>Total Depth: 52.9 ft</b> <b>Initial Depth to Water: 28.64 ft</b>	<b>Pump Type: Peri Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 46 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 8 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
--	--	--

## Test Notes:

Sample time 1605. Sunny 90s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/2/2022 3:25 PM	00:00	7.14 pH	26.02 °C	254.95 µS/cm	2.44 mg/L	7.37 NTU	39.3 mV	28.64 ft	150.00 ml/min
8/2/2022 3:30 PM	05:00	7.09 pH	23.48 °C	264.32 µS/cm	2.67 mg/L	4.75 NTU	31.4 mV	29.30 ft	150.00 ml/min
8/2/2022 3:35 PM	10:00	7.08 pH	23.03 °C	264.84 µS/cm	2.61 mg/L	1.57 NTU	31.7 mV	29.30 ft	150.00 ml/min
8/2/2022 3:40 PM	15:00	7.08 pH	22.93 °C	264.75 µS/cm	2.50 mg/L	1.49 NTU	31.9 mV	29.30 ft	150.00 ml/min
8/2/2022 3:45 PM	20:00	7.07 pH	22.89 °C	263.91 µS/cm	2.46 mg/L	1.23 NTU	30.4 mV	29.30 ft	150.00 ml/min
8/2/2022 3:50 PM	25:00	7.07 pH	22.98 °C	264.42 µS/cm	2.40 mg/L	1.14 NTU	30.4 mV	29.30 ft	150.00 ml/min
8/2/2022 3:55 PM	30:00	7.06 pH	22.81 °C	265.50 µS/cm	2.33 mg/L	1.08 NTU	32.1 mV	29.30 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/4/2022 1:05:05 PM

Project: Plant McIntosh AP-1

Operator Name: Jordan Berisford

<b>Location Name: MGWC-20</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 44.77 ft</b> <b>Total Depth: 54.77 ft</b> <b>Initial Depth to Water: 24.2 ft</b>	<b>Pump Type: Peristaltic pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 49 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 20 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
---	--	--

## Test Notes:

Sunny, sample time -1335

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 10	+/- 0.3	
8/4/2022 1:05 PM	00:00	6.58 pH	43.64 °C	0.28 µS/cm	6.25 mg/L	4.11 NTU	161.4 mV	24.20 ft	150.00 ml/min
8/4/2022 1:10 PM	05:00	6.61 pH	44.92 °C	0.27 µS/cm	6.21 mg/L	3.28 NTU	183.7 mV	24.70 ft	150.00 ml/min
8/4/2022 1:15 PM	10:00	6.19 pH	28.60 °C	361.60 µS/cm	2.10 mg/L	2.81 NTU	125.2 mV	25.50 ft	150.00 ml/min
8/4/2022 1:20 PM	15:00	6.21 pH	26.49 °C	371.88 µS/cm	1.92 mg/L	2.54 NTU	143.7 mV	25.80 ft	150.00 ml/min
8/4/2022 1:25 PM	20:00	6.21 pH	27.53 °C	372.87 µS/cm	1.81 mg/L	1.71 NTU	181.6 mV	25.90 ft	150.00 ml/min
8/4/2022 1:30 PM	25:00	6.21 pH	28.36 °C	373.96 µS/cm	1.79 mg/L	1.69 NTU	185.0 mV	25.90 ft	150.00 ml/min
8/4/2022 1:35 PM	30:00	6.18 pH	28.28 °C	372.69 µS/cm	1.70 mg/L	1.37 NTU	189.8 mV	25.90 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 8/4/2022 11:50:01 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<b>Location Name: MGWC-23</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 32.9 ft</b> <b>Total Depth: 42.9 ft</b> <b>Initial Depth to Water: 34.82 ft</b>	<b>Pump Type: Portable bladder pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 39 ft</b> <b>Estimated Total Volume Pumped: 15 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 300 ml/min</b> <b>Final Draw Down: 11 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728566</b>
--	--	--

## Test Notes:

Sample time 1245. Sunny 90s. EB-04 here at 1115.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/4/2022 11:50 AM	00:00	7.15 pH	32.20 °C	497.80 µS/cm	5.69 mg/L	30.00 NTU	-26.3 mV	34.82 ft	300.00 ml/min
8/4/2022 11:55 AM	05:00	7.49 pH	24.97 °C	511.42 µS/cm	0.87 mg/L	29.90 NTU	-66.1 mV	35.50 ft	300.00 ml/min
8/4/2022 12:00 PM	10:00	7.53 pH	22.89 °C	522.43 µS/cm	0.47 mg/L	25.30 NTU	-104.6 mV	35.60 ft	300.00 ml/min
8/4/2022 12:05 PM	15:00	7.35 pH	22.38 °C	513.21 µS/cm	0.52 mg/L	25.80 NTU	-88.3 mV	35.70 ft	300.00 ml/min
8/4/2022 12:10 PM	20:00	7.11 pH	21.92 °C	494.33 µS/cm	0.87 mg/L	17.80 NTU	-62.4 mV	35.70 ft	300.00 ml/min
8/4/2022 12:15 PM	25:00	7.03 pH	21.69 °C	471.85 µS/cm	0.83 mg/L	12.30 NTU	-48.9 mV	35.70 ft	300.00 ml/min
8/4/2022 12:20 PM	30:00	7.07 pH	21.34 °C	465.60 µS/cm	0.53 mg/L	6.34 NTU	-47.2 mV	35.70 ft	300.00 ml/min
8/4/2022 12:25 PM	35:00	7.20 pH	21.24 °C	461.33 µS/cm	0.32 mg/L	4.59 NTU	-51.5 mV	35.70 ft	300.00 ml/min
8/4/2022 12:30 PM	40:00	7.25 pH	21.20 °C	459.93 µS/cm	0.22 mg/L	1.26 NTU	-27.3 mV	35.70 ft	300.00 ml/min
8/4/2022 12:35 PM	45:00	7.32 pH	22.71 °C	470.37 µS/cm	0.20 mg/L	1.38 NTU	-31.4 mV	35.70 ft	300.00 ml/min
8/4/2022 12:40 PM	50:00	7.32 pH	21.91 °C	460.97 µS/cm	0.16 mg/L	1.68 NTU	-29.5 mV	35.70 ft	300.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------



## Daily Instrument Calibration Log

SITE: Plant McIntosh  
 TECHNICIAN: S. B. [Signature]  
 WATER LEVEL: Solvent  
 WATER LEVEL S/N: 267304

INSTRUMENT S/N: 883530  
 INSTRUMENT TYPE: AquaTroll  
 CAL. SOLUTIONS:

ID: <u>pH 4</u>	LOT #: <u>260243</u>	EXP. DATE: <u>3/24</u>
ID: <u>pH 7</u>	LOT #: <u>2106066</u>	EXP. DATE: <u>8/22</u>
ID: <u>pH 10</u>	LOT #: <u>2008056</u>	EXP. DATE: <u>7/23</u>
ID: <u>Cond</u>	LOT #: <u>1610205</u>	EXP. DATE: <u>11/22</u>
ID: <u>ORP</u>	LOT #: <u>214043</u>	EXP. DATE: <u>4/23</u>
ID:	LOT #:	EXP. DATE:
ID:	LOT #:	EXP. DATE:

Midday pH check  
 Must be less than .10  
 (6.90-7.10 range)  
 Recalibrate if not within range

**Calibration Date:** 8/2/22

RDO: 100% sat. = 102.6 Midday pH check  
 PH: 4.00 = 4.05      7.00 = 7.26      10.00 = 10.40      7.0 = 7.04  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 =      post recal check  
 CONDUCTIVITY: 1413 = 1836  
 ORP (mV) 228 = 220.8

**Calibration Date:** 8/3/22

RDO: 100% sat. = 102.8 Midday pH check  
 PH: 4.00 = 4.06      7.00 = 7.04      10.00 = 10.03      7.0 = 7.02  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 =      post recal check  
 CONDUCTIVITY: 1413 = 1407  
 ORP (mV) 228 = 220

**Calibration Date:** 8/4/22

RDO: 100% sat. = 98.3 Midday pH check  
 PH: 4.00 = 4.02      7.00 = 7.01      10.00 = 9.94      7.0 = 7.07  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 =      post recal check  
 CONDUCTIVITY: 1413 = 1488  
 ORP (mV) 220 = 232.1

**Calibration Date:**

RDO: 100% sat. =      Midday pH check  
 PH: 4.00 =      7.00 =      10.00 =      7.0 =  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 =      post recal check  
 CONDUCTIVITY:      =  
 ORP (mV)      =

**Calibration Date:**

RDO: 100% sat. =      Midday pH check  
 PH: 4.00 =      7.00 =      10.00 =      7.0 =  
 PH Recal (if needed): 4.00 =      7.00 =      10.00 =      7.0 =      post recal check  
 CONDUCTIVITY:      =  
 ORP (mV)      =



## Daily Instrument Calibration Log

SITE: Plant McIntosh  
TECHNICIAN: J. Berdoul

INSTRUMENT S/N: 12050C617205  
INSTRUMENT TYPE: Hach 2100Q  
CAL. SOLUTION: 0 NTU - LOT # 10/4 EXP. DATE: 8/20  
10 NTU - LOT # 42122 EXP. DATE: 8/23  
20 NTU - LOT # 42122 EXP. DATE: 8/23

Calibration Date: 8/21/22

Calibration Solution	Instrument Reading	
0.0	0.35	NTU
10.0	9.42	NTU
20.0	20.5	NTU

Calibration Date: 8/23/22

Calibration Solution	Instrument Reading	
0.0	0.41	NTU
10.0	9.79	NTU
20.0	20.1	NTU

Calibration Date: 8/23/22

Calibration Solution	Instrument Reading	
0.0	0.28	NTU
10.0	9.47	NTU
20.0	19.0	NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU



## Daily Instrument Calibration Log

SITE: Plant McIntosh AP-1  
 TECHNICIAN: A Schnitzler  
 WATER LEVEL: Solinst  
 WATER LEVEL S/N: 377060

INSTRUMENT S/N: 728566  
 INSTRUMENT TYPE: AquaTroll  
 CAL. SOLUTIONS:

ID:	LOT #:	EXP. DATE:
<u>pH4</u>	<u>16K617</u>	<u>11/23</u>
<u>pH7</u>	<u>266169</u>	<u>03/24</u>
<u>pH10</u>	<u>166429</u>	<u>7/23</u>
<u>Cond</u>	<u>16H998</u>	<u>8/23</u>
<u>ORP</u>	<u>21140143</u>	<u>4/23</u>
ID:	LOT #:	EXP. DATE:
ID:	LOT #:	EXP. DATE:

*Midday pH check*

*Must be less than .10*

*(6.90-7.10 range)*

*Recalibrate if not within range*

**Calibration Date:** 8/2/22

RDO: 100% sat. = 101.7

*Midday pH check*

PH: 4.00 = 4.04      7.00 = 7.22      10.00 = 10.60

7.0 = 6.99

PH Recal (if needed): 4.00 = ~~4.04~~      7.00 = —      10.00 = ~~10.60~~

7.0 = NA post recal check

CONDUCTIVITY: 1413 = 1804

ORP (mV) 228 = 221.5

**Calibration Date:** 8/3/22

RDO: 100% sat. = 107.07

*Midday pH check*

PH: 4.00 = 4.08      7.00 = 7.02      10.00 = 9.98

7.0 = 6.98

PH Recal (if needed): 4.00 = —      7.00 = —      10.00 = —

7.0 = — post recal check

CONDUCTIVITY: 1413 = 1535

ORP (mV) 228 = 227

**Calibration Date:** 8/4/22

RDO: 100% sat. = 94.66

*Midday pH check*

PH: 4.00 = 3.99      7.00 = 7.01      10.00 = 9.99

7.0 = 6.99

PH Recal (if needed): 4.00 = —      7.00 = —      10.00 = —

7.0 = — post recal check

CONDUCTIVITY: 1413 = 1518

ORP (mV) 228 = 235

**Calibration Date:** 8/4 Recal

RDO: 100% sat. = 98.36

*Midday pH check*

PH: 4.00 = 4.07      7.00 = 6.99      10.00 = 9.81

7.0 = —

PH Recal (if needed): 4.00 = —      7.00 = —      10.00 = —

7.0 = — post recal check

CONDUCTIVITY: — = 1600

ORP (mV) — = 232.8

**Calibration Date:**

RDO: 100% sat. = —

*Midday pH check*

PH: 4.00 = —      7.00 = —      10.00 = —

7.0 = —

PH Recal (if needed): 4.00 = —      7.00 = —      10.00 = —

7.0 = — post recal check

CONDUCTIVITY: — = —

ORP (mV) — = —



## Daily Instrument Calibration Log

SITE: Plant McIntosh AP-1  
TECHNICIAN: A. Schnitker

INSTRUMENT S/N: 11090C012353  
INSTRUMENT TYPE: Hach 2100Q  
CAL. SOLUTION: 0 NTU - LOT # NA EXP. DATE: Fresh DI water  
10 NTU - LOT # A2122 EXP. DATE: 8/23  
20 NTU - LOT # A2122 EXP. DATE: 8/23

Calibration Date: 8/2/22

Calibration Solution	Instrument Reading	
0.0	0.42	NTU
10.0	10.2	NTU
20.0	20.1	NTU

Calibration Date: 8/3/22

Calibration Solution	Instrument Reading	
0.0	0.18	NTU
10.0	10.1	NTU
20.0	20.6	NTU

Calibration Date: 8/4/22

Calibration Solution	Instrument Reading	
0.0	0.40	NTU
10.0	10.7	NTU
20.0	19.9	NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU



**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

1 - Location/Identification		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Is the well visible and accessible?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well require protection from traffic?	No	No	No	No	No	No	No	No	No	No	No
d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

2 - Protective Outer Casing

		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

3 - Surface Pad

		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

4 - Internal Well Casing		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
f	Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	No	No	No	No	No	No	No	No	No	No	No

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

5 - Sampling (Groundwater Monitoring Wells Only):

		MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
a	Does the well recharge adequately when purged?	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes	N/A	Yes
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	No	No	No	N/A	No	No	No	No	No	N/A	No

Note: N/A - Not Applicable

6 - Based on your professional judgment, is the well construction / location appropriate to:

	MGWA-5	MGWA-6	MGWA-6A	MGWA-9	MGWA-10	MGWA-11	MGWC-1	MGWC-2	MGWC-3	MGWC-4	MGWC-7
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:

Staff: A. Schnittker  
Date: 8/1/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

1 - Location/Identification		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Is the well visible and accessible?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well require protection from traffic?	No	No	No	No	No	No	No	No	No	No	No
d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

2 - Protective Outer Casing		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

3 - Surface Pad

		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".



**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

4 - Internal Well Casing		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
e	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
f	Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	No	No	No	No	No	No	No	No	No	No	No

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

5 - Sampling (Groundwater Monitoring Wells Only):

		MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
a	Does the well recharge adequately when purged?	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	No	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: N/A - Not Applicable

6 - Based on your professional judgment, is the well construction / location appropriate to:

	MGWC-8	MGWC-12	MGWC-19	MGWC-20	MGWC-21	MGWC-22	MGWC-23	MGWC-24	PZ-13	PZ-14	PZ-15
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:

Staff: A. Schnittker  
Date: 8/1/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

1 - Location/Identification		PZ-16	PZ-17	PZ-18
a	Is the well visible and accessible?	Yes	Yes	Yes
b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes
c	Does the well require protection from traffic?	No	No	No
d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

2 - Protective Outer Casing		PZ-16	PZ-17	PZ-18
a	Is the protective casing free from apparent damage?	Yes	Yes	Yes
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes
c	Does the casing have a functioning weep hole?	Yes	Yes	Yes
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes
e	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

3 - Surface Pad		PZ-16	PZ-17	PZ-18
a	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes
b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes
c	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes
e	Is the pad surface clean? (Not covered by soil or debris)	Yes	No	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

4 - Internal Well Casing		PZ-16	PZ-17	PZ-18
a	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes
c	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes
e	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes
f	Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	No	No	No

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
August 2022 Well Inspection Form**



Permit No.: 051-011D

5 - Sampling (Groundwater Monitoring Wells Only):

		<b>PZ-16</b>	<b>PZ-17</b>	<b>PZ-18</b>
a	Does the well recharge adequately when purged?	N/A	N/A	N/A
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	N/A	N/A	N/A

Note: N/A - Not Applicable

6 - Based on your professional judgment, is the well construction / location appropriate to:

	<b>PZ-16</b>	<b>PZ-17</b>	<b>PZ-18</b>
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	No	Yes

7 - Corrective actions completed and Notes:

PZ-17 - Well pad is currently buried by sediment from adjacent construction activity.

Staff: A. Schnittker

Date: 8/1/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

# APPENDIX B

## Statistical Analyses



## APPENDIX B

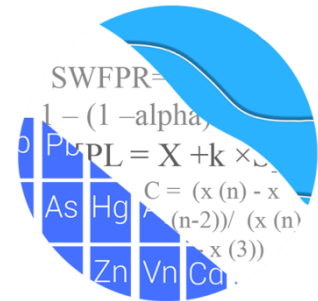
---

*Statistical Analysis Report  
February 2022 Monitoring Event*

# GROUNDWATER STATS CONSULTING

August 31, 2022

Southern Company Services  
Attn: Ms. Lauren Coker  
241 Ralph McGill Blvd NE, Bin 10160  
Atlanta, Georgia 30308



Re: Plant McIntosh Ash Pond 1 (AP-1)  
Statistical Analysis February 2022

Dear Ms. Coker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the February 2022 Semi-Annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant McIntosh AP-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III and IV parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Sampling is conducted on a semi-annual basis for all constituents. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** MGWA-5, MGWA-6, MGWA-6A, MGWA-10, and MGWA-11
- **Downgradient wells:** MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8, and MGWC-12

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The Coal Combustion Residuals (CCR) program consists of the following constituents:

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228 fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided with the previous screening and demonstrated that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

The original background screening was conducted in 2017 by MacStat Consulting. Values identified as outliers were flagged in the database and excluded prior to construction of statistical limits. Both intrawell and interwell prediction limits, combined with a 1-of-2 resample plan, were originally recommended. The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach.

Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

### **Summary of Statistical Methods – Appendix III Parameters**

Based on the earlier evaluation described above, the following method was selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. While this was not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

### **Statistical Analysis of Appendix III Parameters – February 2022**

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. When values in background have been flagged as outliers, they may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged as outliers and a summary of flagged values follows this report (Figure C).

#### Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through February 2022 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The February 2022 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter and includes a list of exceedances. Exceedances were identified for the following well/constituent pairs:

- Boron: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8
- Calcium: MGWC-3
- Chloride: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8
- Fluoride: MGWC-7
- Sulfate: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8
- TDS: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8

### Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen’s Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

#### Increasing

- Boron: MGWC-7 and MGWC-8
- Sulfate: MGWC-3 and MGWC-8
- TDS: MGWC-8

#### Decreasing

- Boron: MGWA-6 (upgradient) and MGWC-2
- Calcium: MGWA-10 (upgradient)
- Chloride: MGWA-5 (upgradient), MGWA-6 (upgradient), MGWA-6A (upgradient), MGWC-2, and MGWC-7
- Fluoride: MGWC-7
- Sulfate: MGWA-5 (upgradient), MGWA-6 (upgradient), MGW-10 (upgradient), and MGWC-2
- TDS: MGWC-2

### **Statistical Methods – Appendix IV Parameters**

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits) or site-specific limits that are based on upgradient background groundwater quality. Site-

specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. Confidence intervals are provided for Appendix IV well/constituent pairs with detections and with current reported data. The methods are described below.

## **Statistical Analysis of Appendix IV Parameters – February 2022**

For Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that contain 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis.

During previous analyses, high concentrations from May 2016 through April 2017 for arsenic at upgradient well MGWA-6 were deselected prior to calculating an interwell upper tolerance limit. These historical measurements were considerably higher than more recent measurements; and this step results in a more conservative (i.e., lower) statistical limit from a regulatory perspective. All background data will be re-evaluated for upgradient wells during the next analysis. A summary of these background data ranges follows this letter. No new values were flagged as outliers and a summary of previously flagged outliers follows this report (Figure C).

### Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for combined radium. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

### Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure G).

### Confidence Intervals

To complete the statistical comparison of downgradient well data to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient and delineation well using all available data through February 2022.

The Sanitas software was used to calculate both the tolerance limits and the confidence intervals. Confidence intervals were compared to the GWPS prepared as described above (Figure H). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of the confidence intervals follow this letter and exceedances were identified for the following well/constituent pairs:

- Cobalt: MGWC-7 and MGWC-8
- Lithium: MGWC-7

### Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:



Increasing:

- Cobalt: MGWC-8

Decreasing:

- None

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant McIntosh AP-1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins  
Project Manager



Kristina L. Rayner  
Senior Statistician

# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/23/2022 5:02 PM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

Antimony (mg/L)  
MGWC-1, MGWC-2, MGWC-8

Beryllium (mg/L)  
MGWC-12, MGWC-2, MGWC-7

Cadmium (mg/L)  
MGWC-12, MGWC-3

Lead (mg/L)  
MGWC-1, MGWC-2, MGWC-3

Mercury (mg/L)  
MGWC-1

Molybdenum (mg/L)  
MGWC-2, MGWC-3

Thallium (mg/L)  
MGWC-7

# Date Ranges

Date: 5/23/2022 1:17 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

Arsenic (mg/L)

MGWA-6 overall:3/29/2018-2/23/2022

# Interwell Prediction Limits - Significant Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 5/23/2022, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	2/22/2022	1.7	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	2/23/2022	2	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	2/23/2022	0.83	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	2/23/2022	2.1	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	2/23/2022	4.1	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	2/23/2022	120	Yes	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Chloride (mg/L)	MGWC-1	9.409	n/a	2/22/2022	13	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.409	n/a	2/23/2022	13	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.409	n/a	2/23/2022	14	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.409	n/a	2/23/2022	9.8	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.409	n/a	2/23/2022	11	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	2/23/2022	0.22	Yes	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	20.19	n/a	2/22/2022	150	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	20.19	n/a	2/23/2022	180	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	20.19	n/a	2/23/2022	150	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	20.19	n/a	2/23/2022	260	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	20.19	n/a	2/23/2022	390	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	349.9	n/a	2/22/2022	420	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	349.9	n/a	2/23/2022	490	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	349.9	n/a	2/23/2022	450	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	349.9	n/a	2/23/2022	390	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	349.9	n/a	2/23/2022	630	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2

# Interwell Prediction Limits - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 5/23/2022, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron (mg/L)</b>	<b>MGWC-1</b>	<b>0.18</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>1.7</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-12	0.18	n/a	2/22/2022	0.08ND	No	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>0.18</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>2</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-3	0.18	n/a	2/23/2022	0.83	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.18</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>2.1</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.18</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>4.1</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (NDs) 1 of 2</b>
Calcium (mg/L)	MGWC-1	110	n/a	2/22/2022	100	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	2/22/2022	35	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	2/23/2022	100	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
<b>Calcium (mg/L)</b>	<b>MGWC-3</b>	<b>110</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>120</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (normality) 1 of 2</b>
Calcium (mg/L)	MGWC-7	110	n/a	2/23/2022	61	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	2/23/2022	97	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-1</b>	<b>9.409</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>13</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MGWC-12	9.409	n/a	2/22/2022	4	No	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>9.409</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>13</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-3</b>	<b>9.409</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>14</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>9.409</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>9.8</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-8</b>	<b>9.409</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>11</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Fluoride (mg/L)	MGWC-1	0.19	n/a	2/22/2022	0.047J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	2/22/2022	0.093J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-2	0.19	n/a	2/23/2022	0.075J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	2/23/2022	0.086J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>0.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>0.22</b>	<b>Yes</b>	<b>84</b>	<b>n/a</b>	<b>n/a</b>	<b>30.95</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002742</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	MGWC-8	0.19	n/a	2/23/2022	0.05J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	7.926	4.577	2/22/2022	7.32	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-12	7.926	4.577	2/22/2022	7.41	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-2	7.926	4.577	2/23/2022	7.44	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-3	7.926	4.577	2/23/2022	6.98	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-7	7.926	4.577	2/23/2022	6.91	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-8	7.926	4.577	2/23/2022	6.22	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-1</b>	<b>20.19</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>150</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-12	20.19	n/a	2/22/2022	4.8	No	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>20.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>180</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-3</b>	<b>20.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>150</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-7</b>	<b>20.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>260</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-8</b>	<b>20.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>390</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-1</b>	<b>349.9</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>420</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
TDS (mg/L)	MGWC-12	349.9	n/a	2/22/2022	190	No	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>349.9</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>490</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-3</b>	<b>349.9</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>450</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-7</b>	<b>349.9</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>390</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>349.9</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>630</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>

## Appendix III Trend Tests - Significant Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 5/23/2022, 4:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-6 (bg)	-0.02061	-104	-68	Yes	18	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2895	-101	-68	Yes	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.06861	109	68	Yes	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.7274	78	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-10 (bg)	-0.4171	-75	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.185	-77	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.199	-129	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.3857	-22	-21	Yes	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.886	-127	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.6906	-116	-68	Yes	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.04682	-101	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.304	-90	-68	Yes	18	27.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.6861	-91	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-3.372	-119	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-27.24	-126	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	7.58	117	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	59.07	102	68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-36.03	-109	-68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	89.13	101	68	Yes	18	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 5/23/2022, 4:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	44	68	No	18	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	20	68	No	18	61.11	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	29	68	No	18	88.89	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-0.02061</b>	<b>-104</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>16.67</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWA-6A (bg)	0	2	21	No	8	75	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1685	65	68	No	18	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>-0.2895</b>	<b>-101</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWC-3	0	8	68	No	18	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.06861</b>	<b>109</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.7274</b>	<b>78</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.4171</b>	<b>-75</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	MGWA-11 (bg)	0	-3	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-5 (bg)	-0.1736	-22	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6 (bg)	0	13	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6A (bg)	-0.643	-1	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-3	2.173	50	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-10 (bg)	0	1	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.02392	-9	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.185</b>	<b>-77</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-1.199</b>	<b>-129</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6A (bg)</b>	<b>-0.3857</b>	<b>-22</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-1	0	-21	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>-1.886</b>	<b>-127</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-3	0.185	64	68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.6906</b>	<b>-116</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-8	0.2771	65	68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-10 (bg)	0	-47	-74	No	19	63.16	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	0.003202	20	74	No	19	10.53	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.003692	-38	-74	No	19	21.05	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.002711	-32	-74	No	19	31.58	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0.01291	9	21	No	8	25	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.04682</b>	<b>-101</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.304</b>	<b>-90</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>27.78</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-11 (bg)	0.2448	58	68	No	18	33.33	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.6861</b>	<b>-91</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-3.372</b>	<b>-119</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-6A (bg)	0.02637	0	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	3.959	39	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>-27.24</b>	<b>-126</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-3</b>	<b>7.58</b>	<b>117</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWC-7	3.104	56	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-8</b>	<b>59.07</b>	<b>102</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWA-10 (bg)	-5.208	-50	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	0.5376	14	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	0	4	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	0	-12	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	8.255	6	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	12.37	35	68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>-36.03</b>	<b>-109</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWC-3	8.026	39	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	10.03	35	68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>89.13</b>	<b>101</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Upper Tolerance Limit Summary Table

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 4:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.002	n/a	n/a	n/a	n/a	71	n/a	n/a	90.14	n/a	n/a	0.0262	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.014	n/a	n/a	n/a	n/a	81	n/a	n/a	35.8	n/a	n/a	0.01569	NP Inter(normality)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	n/a	89	n/a	n/a	0	n/a	n/a	0.01041	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	79	n/a	n/a	93.67	n/a	n/a	0.01738	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	89	n/a	n/a	98.88	n/a	n/a	0.01041	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0063	n/a	n/a	n/a	n/a	79	n/a	n/a	70.89	n/a	n/a	0.01738	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	89	n/a	n/a	74.16	n/a	n/a	0.01041	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.141	n/a	n/a	n/a	n/a	90	0.5681	0.2949	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.19	n/a	n/a	n/a	n/a	84	n/a	n/a	30.95	n/a	n/a	0.01345	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	71	n/a	n/a	92.96	n/a	n/a	0.0262	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	n/a	89	n/a	n/a	29.21	n/a	n/a	0.01041	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a	79	n/a	n/a	96.2	n/a	n/a	0.01738	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	n/a	79	n/a	n/a	60.76	n/a	n/a	0.01738	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	59	n/a	n/a	89.83	n/a	n/a	0.04849	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	79	n/a	n/a	81.01	n/a	n/a	0.01738	NP Inter(NDs)



<b>PLANT MCINTOSH AP 1 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006		0.002	0.006
Arsenic, Total (mg/L)	0.01		0.014	0.014
Barium, Total (mg/L)	2		0.13	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.0063	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0025	0.006
Combined Radium, Total (pCi/L)	5		1.14	5
Fluoride, Total (mg/L)	4		0.19	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.015	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*GWPS = Groundwater Protection Standard*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

# Confidence Intervals - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 6/2/2022, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	MGWC-7	0.01018	0.007454	0.006	Yes	20	0.008815	0.002397	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01653	0.007613	0.006	Yes	20	0.01207	0.007847	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	20	0.1211	0.02015	0	None	No	0.01	NP (normality)

# Confidence Intervals - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 6/2/2022, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MGWC-12	0.002	0.0004	0.006	No	16	0.0019	0.0004	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	16	0.001894	0.000425	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	16	0.001998	0.0000075	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002888	0.001978	0.014	No	20	0.002433	0.0008013	0	None	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001111	0.0006611	0.014	No	20	0.00098	0.0003666	30	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	20	0.0009045	0.0002067	80	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.001658	0.001369	0.014	No	20	0.001492	0.0003034	5	None	x^2	0.01	Param.
Arsenic (mg/L)	MGWC-7	0.0008456	0.000518	0.014	No	20	0.0008245	0.0002843	35	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00099	0.014	No	20	0.0009025	0.0002008	75	Kaplan-Meier	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	20	0.1072	0.01679	0	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06567	0.04922	2	No	20	0.05745	0.01448	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.05445	0.04909	2	No	20	0.05177	0.004721	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.1553	0.14	2	No	20	0.1477	0.0134	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.014	0.01	2	No	20	0.01295	0.006858	5	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.03885	0.03307	2	No	20	0.03607	0.005348	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	18	0.002371	0.0005468	94.44	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	18	0.002378	0.0005162	94.44	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001266	0.0006815	0.004	No	18	0.001323	0.0007309	16.67	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	20	0.002165	0.0008213	85	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.00318	0.001313	0.005	No	20	0.002444	0.001915	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00023	0.005	No	20	0.002386	0.0005076	95	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.001201	0.0005164	0.005	No	20	0.001461	0.00113	30	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.002	0.1	No	18	0.002089	0.0003771	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.002	0.1	No	18	0.003567	0.006354	88.89	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	18	0.002072	0.0003064	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	18	0.002056	0.0002357	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	18	0.00205	0.0003569	88.89	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.002	0.1	No	18	0.002061	0.0002593	94.44	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.0004	0.006	No	20	0.001681	0.001049	60	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	20	0.002333	0.0005581	90	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.00333	0.002554	0.006	No	20	0.002942	0.000684	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	20	0.000881	0.0007174	15	None	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>MGWC-7</b>	<b>0.01018</b>	<b>0.007454</b>	<b>0.006</b>	<b>Yes</b>	<b>20</b>	<b>0.008815</b>	<b>0.002397</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.01653</b>	<b>0.007613</b>	<b>0.006</b>	<b>Yes</b>	<b>20</b>	<b>0.01207</b>	<b>0.007847</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.665	1.256	5	No	21	1.46	0.3715	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7283	0.4259	5	No	20	0.5771	0.2662	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.732	0.4444	5	No	20	0.5882	0.2533	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.627	1.335	5	No	21	1.481	0.2642	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.288	0.9211	5	No	20	1.104	0.3229	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	2.018	1.422	5	No	20	1.72	0.524	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.2402	0.1449	4	No	19	0.1925	0.0814	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.2538	0.1938	4	No	19	0.2238	0.05123	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.1094	0.07245	4	No	19	0.09747	0.03011	36.84	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	MGWC-3	0.11	0.082	4	No	19	0.09974	0.03667	31.58	None	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3423	0.2223	4	No	19	0.2823	0.1025	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.11	0.084	4	No	19	0.09868	0.02762	15.79	None	No	0.01	NP (normality)
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	16	0.0009438	0.000225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	16	0.0009056	0.0002587	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	16	0.0009513	0.000195	93.75	None	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01246	0.01027	0.04	No	20	0.01137	0.001925	5	None	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.02169	0.01585	0.04	No	20	0.01877	0.00515	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.006782	0.005138	0.04	No	20	0.006094	0.001801	5	None	ln(x)	0.01	Param.
Lithium (mg/L)	MGWC-3	0.01342	0.0113	0.04	No	20	0.01236	0.00186	0	None	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>MGWC-7</b>	<b>0.13</b>	<b>0.112</b>	<b>0.04</b>	<b>Yes</b>	<b>20</b>	<b>0.1211</b>	<b>0.02015</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	MGWC-8	0.03863	0.02708	0.04	No	20	0.03286	0.01016	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 6/2/2022, 11:56 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.002	No	18	0.0001867	0.00003886	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.002	No	18	0.0001877	0.00003609	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.002	No	18	0.0001928	0.00003064	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.002	No	18	0.0001933	0.00002828	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00021	0.00014	0.002	No	19	0.0004135	0.0009031	42.11	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0012	0.1	No	18	0.004547	0.00577	22.22	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.002	0.1	No	18	0.01126	0.006218	72.22	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	18	0.01436	0.002708	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	18	0.01437	0.002663	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	14	0.004679	0.001203	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	14	0.004662	0.001264	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	14	0.004675	0.001216	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	14	0.004674	0.001219	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-7	0.005	0.00026	0.05	No	14	0.004661	0.001267	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.00038	0.05	No	14	0.003813	0.002011	71.43	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00016	0.002	No	18	0.0007669	0.0003893	72.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	18	0.0009122	0.0002563	88.89	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	18	0.0009561	0.0001862	94.44	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	18	0.0009183	0.0002404	88.89	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.0002481	0.000136	0.002	No	18	0.0003994	0.000342	22.22	Kaplan-Meier	ln(x)	0.01	Param.

# Appendix IV Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 5:06 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-8	0.003692	111	81	Yes	20	0	n/a	n/a	0.01	NP

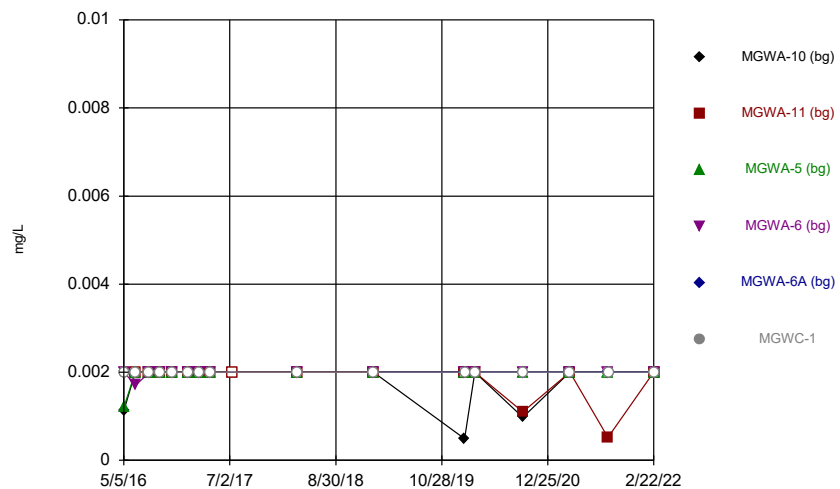
# Appendix IV Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 5:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	MGWA-10 (bg)	0	-6	-81	No	20	85	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	19	81	No	20	95	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	17	81	No	20	95	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	4	81	No	20	45	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6A (bg)	0.00005762	3	25	No	9	22.22	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-7	-0.0004386	-47	-81	No	20	0	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.003692</b>	<b>111</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Lithium (mg/L)	MGWA-10 (bg)	0.00007562	17	81	No	20	5	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0007894	27	81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0003923	43	81	No	20	5	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6 (bg)	0	7	81	No	20	95	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.0009798	-24	-25	No	9	55.56	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWC-7	0	-1	-81	No	20	0	n/a	n/a	0.01	NP

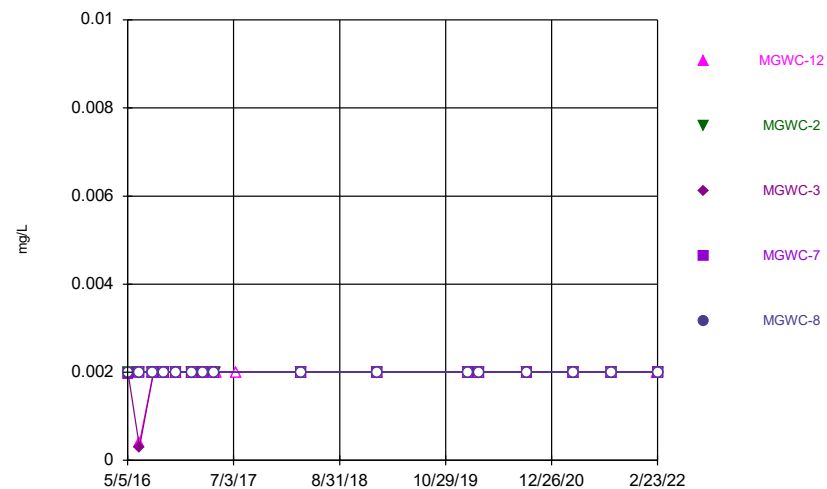
FIGURE A.

### Time Series



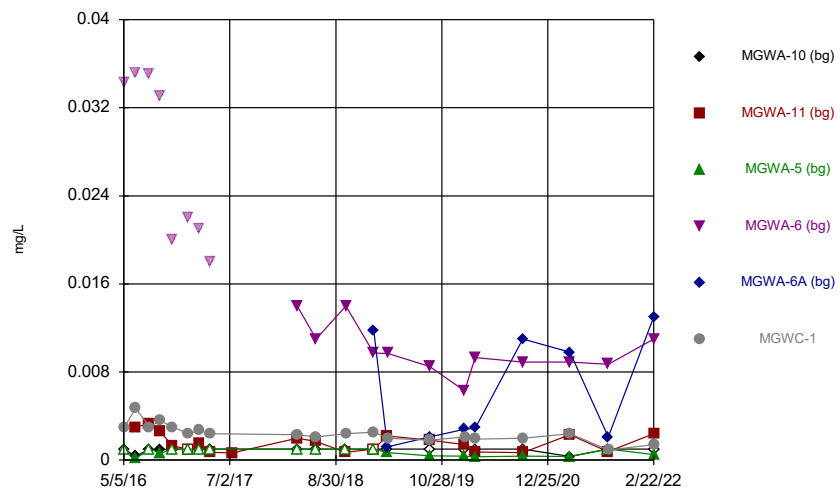
Constituent: Antimony Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



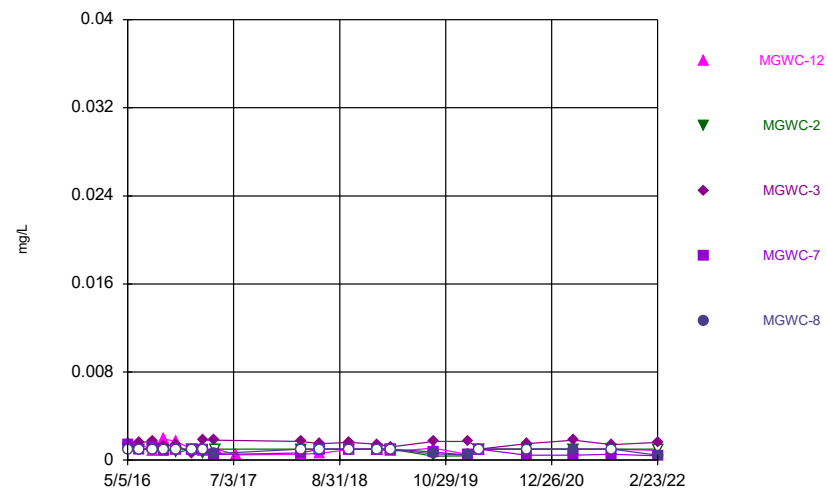
Constituent: Antimony Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: Arsenic Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

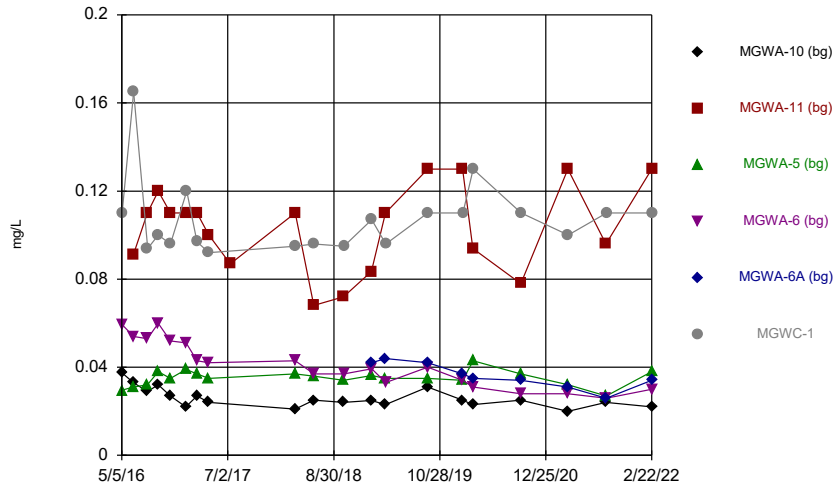
### Time Series



Constituent: Arsenic Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

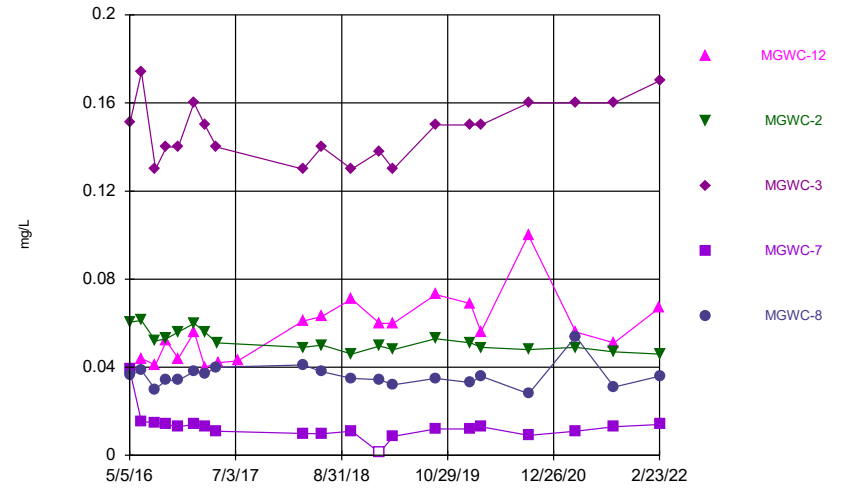


Time Series



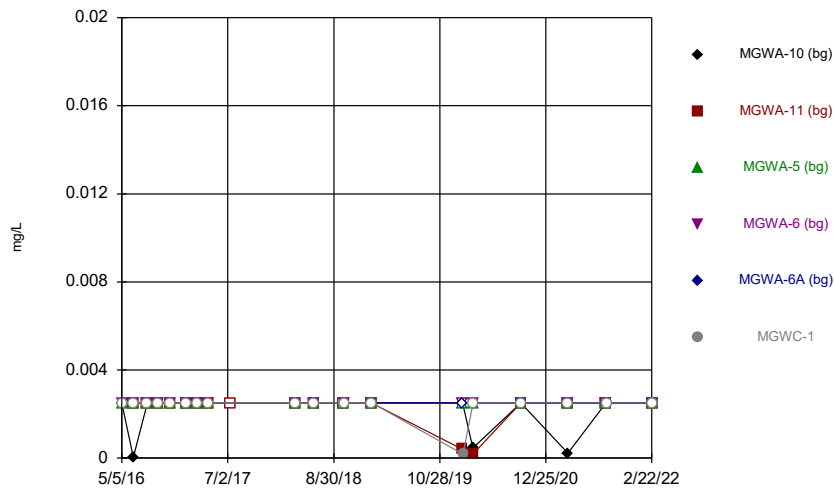
Constituent: Barium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



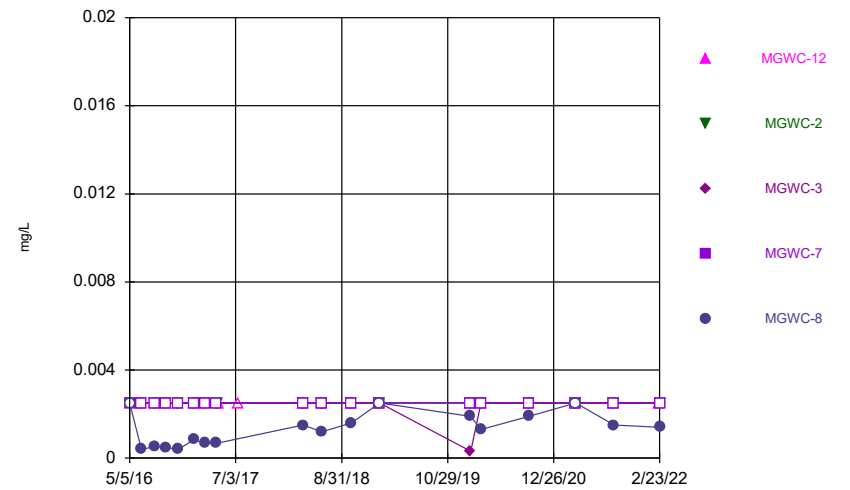
Constituent: Barium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



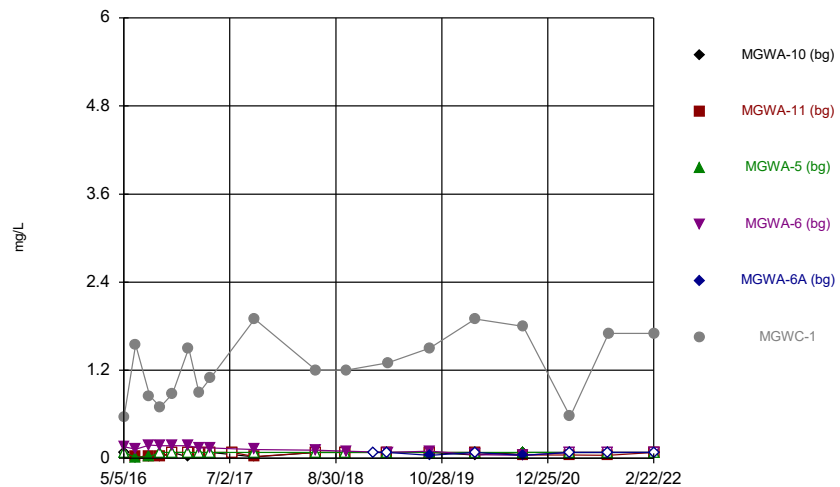
Constituent: Beryllium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



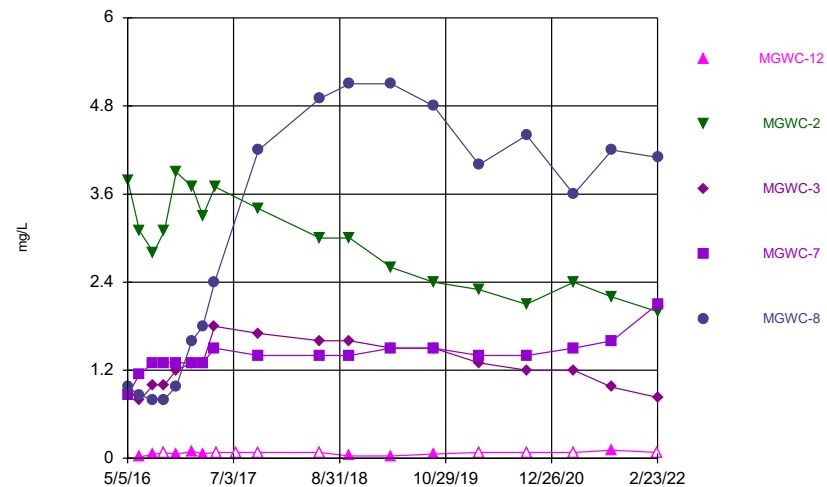
Constituent: Beryllium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



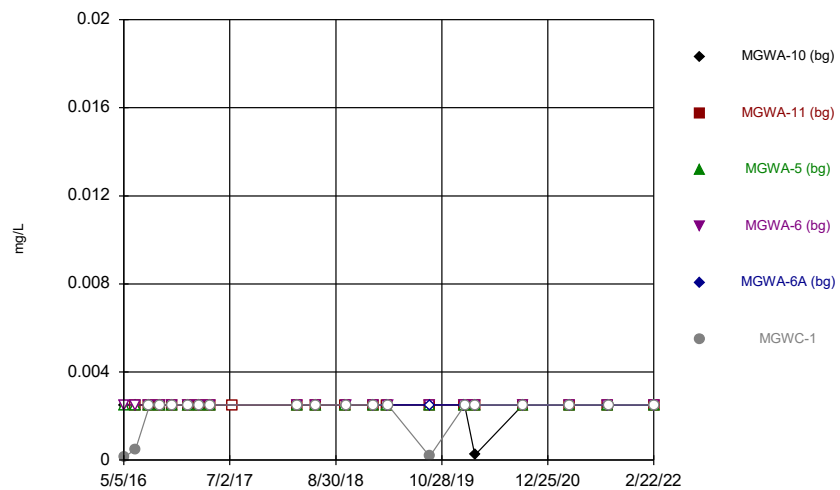
Constituent: Boron Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



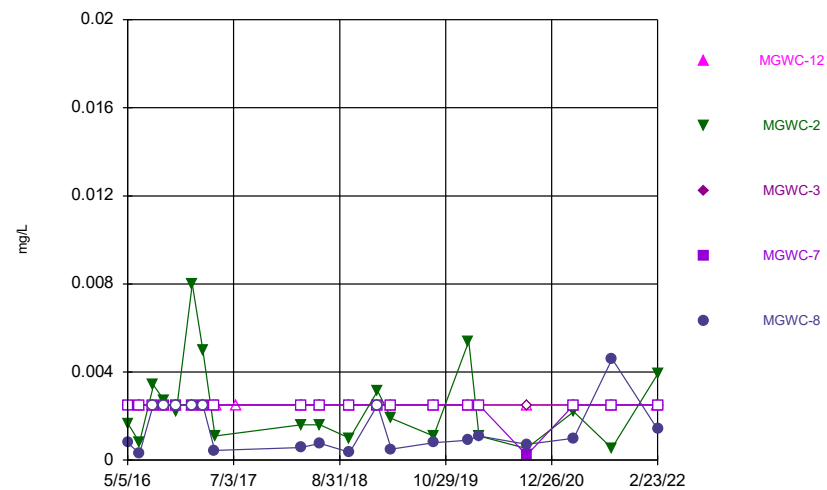
Constituent: Boron Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



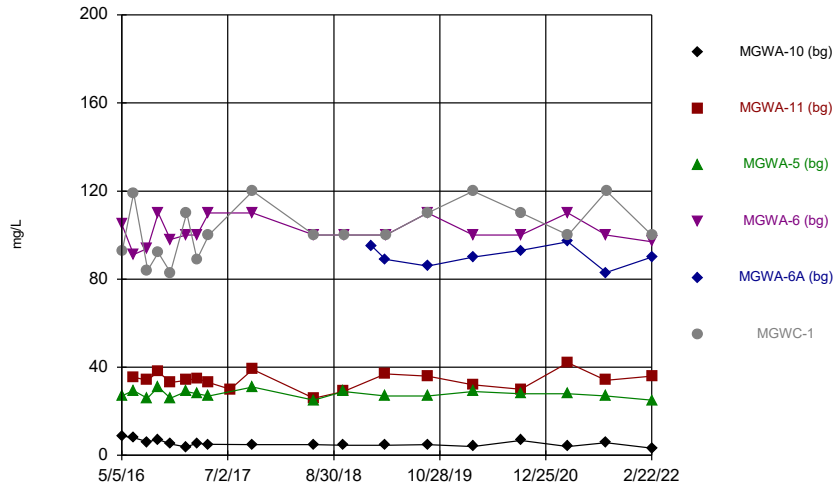
Constituent: Cadmium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



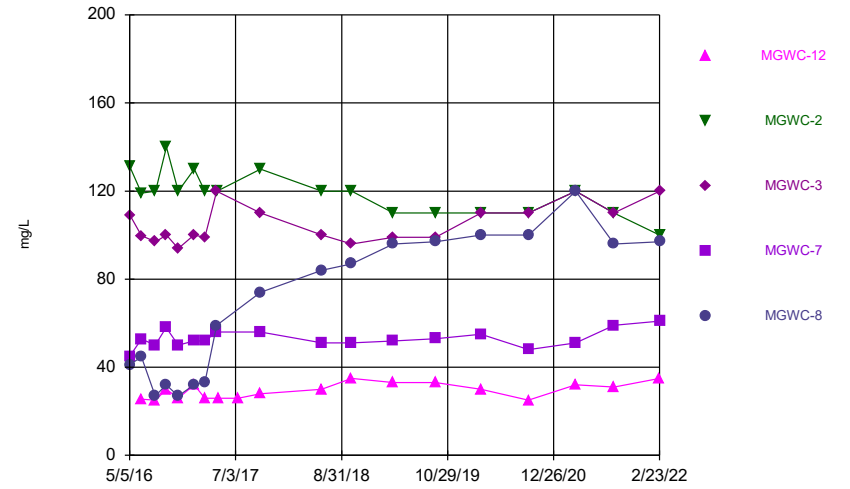
Constituent: Cadmium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



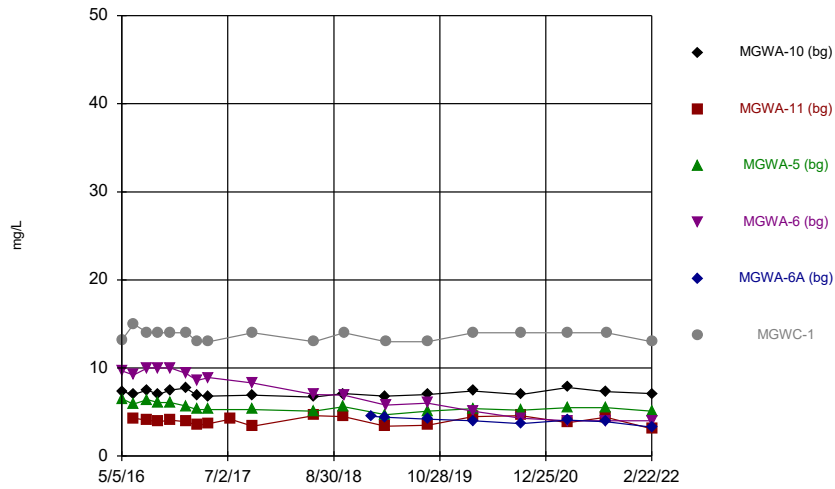
Constituent: Calcium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



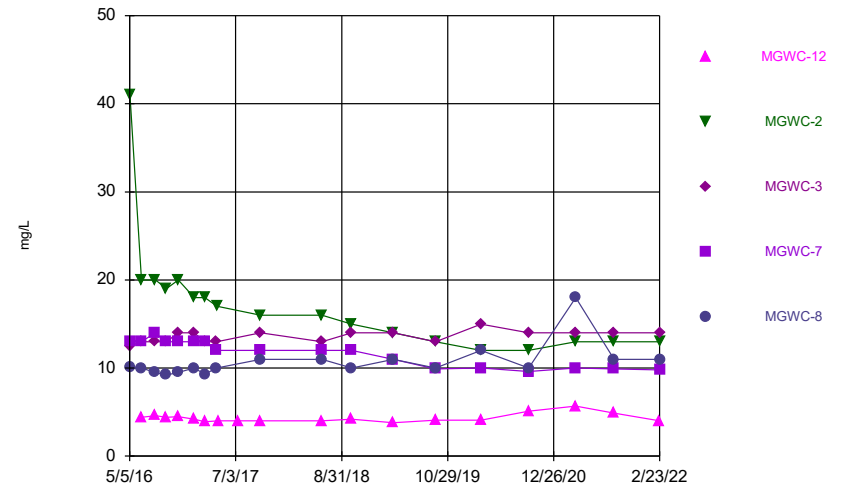
Constituent: Calcium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



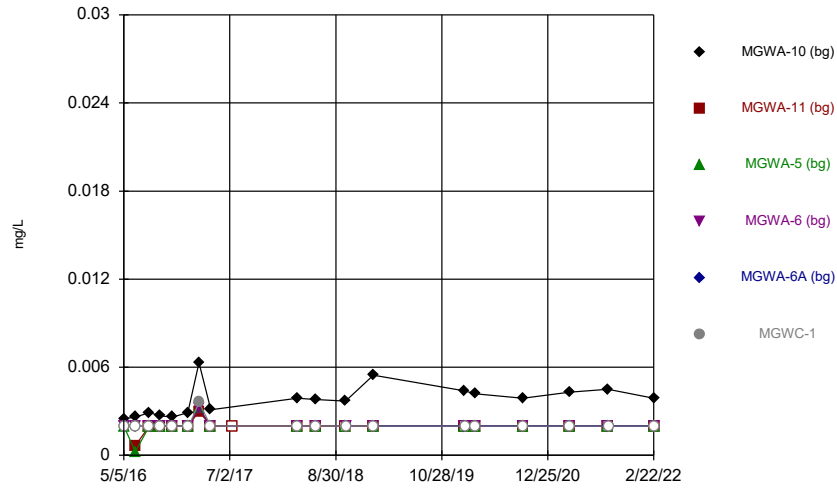
Constituent: Chloride Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



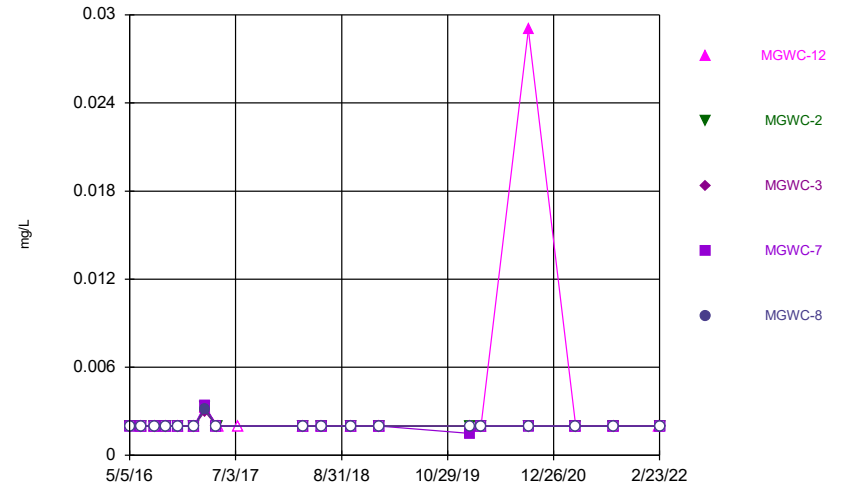
Constituent: Chloride Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



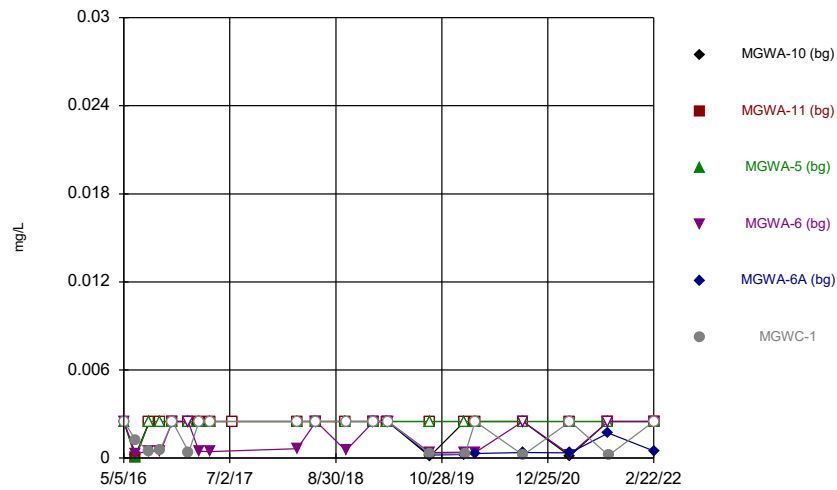
Constituent: Chromium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



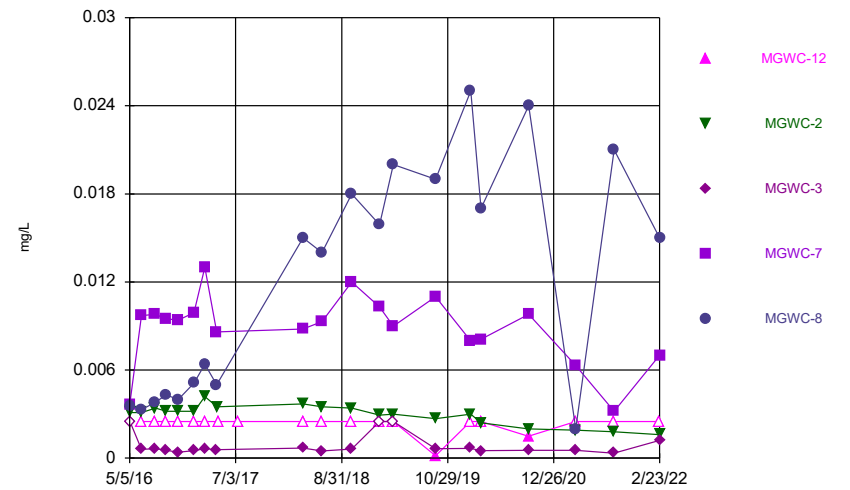
Constituent: Chromium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



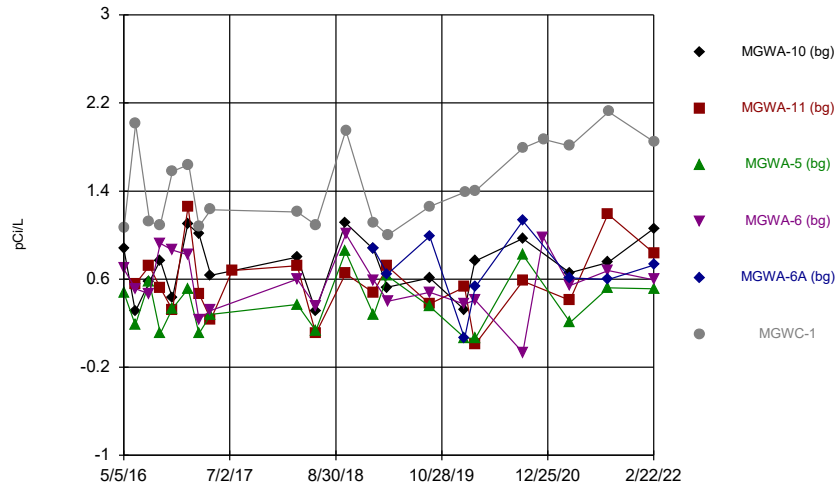
Constituent: Cobalt Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



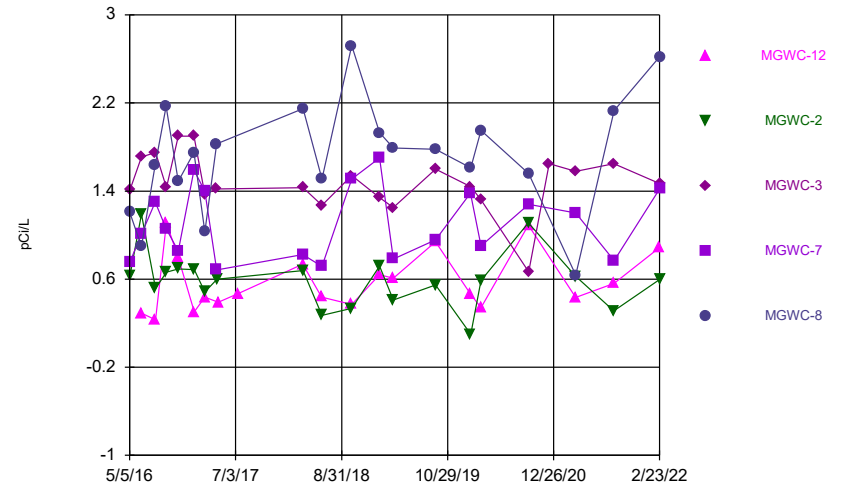
Constituent: Cobalt Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



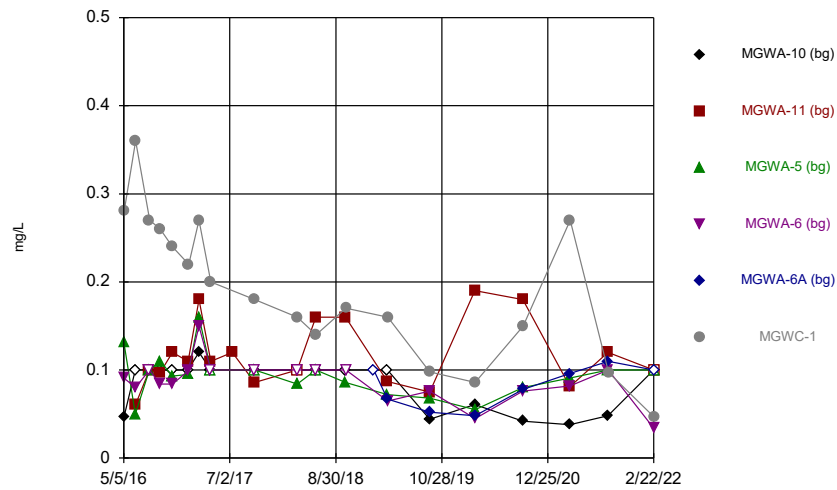
Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



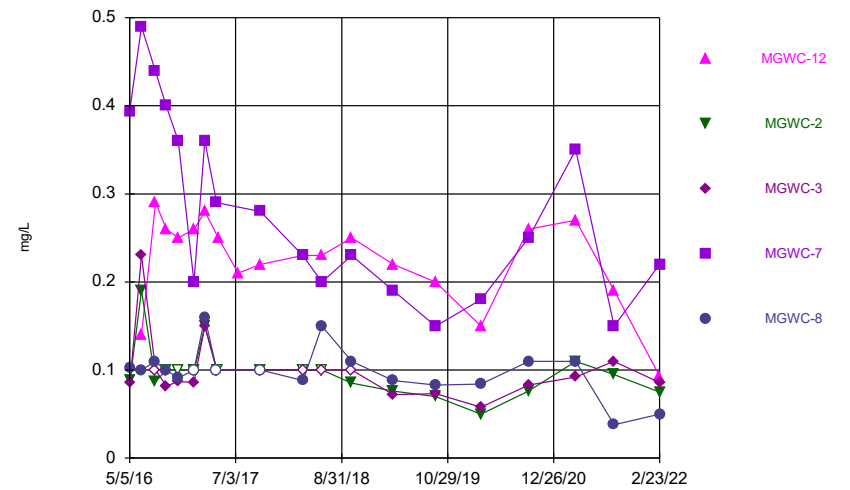
Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



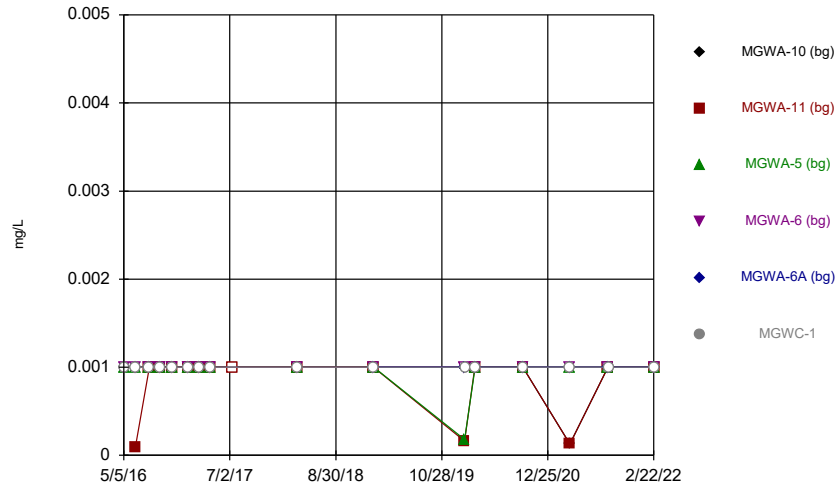
Constituent: Fluoride Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



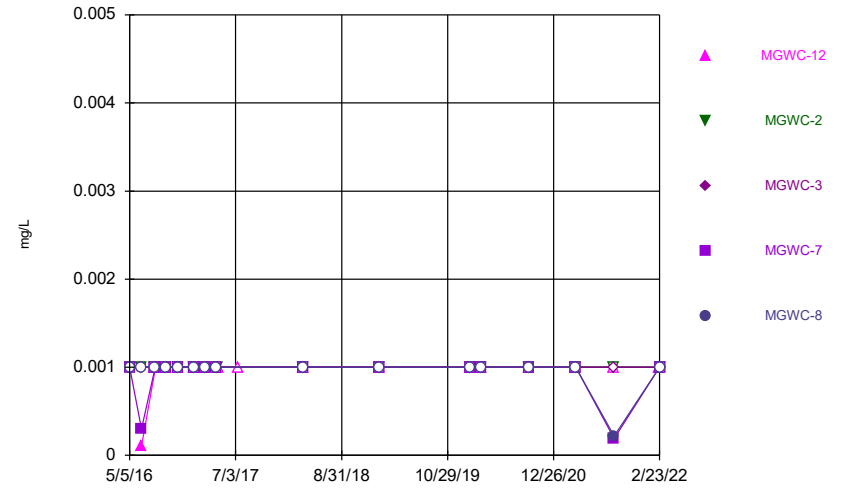
Constituent: Fluoride Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



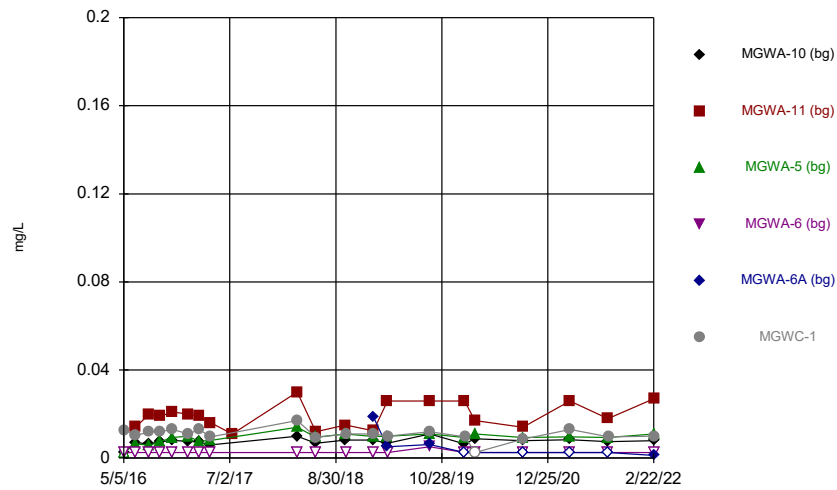
Constituent: Lead Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



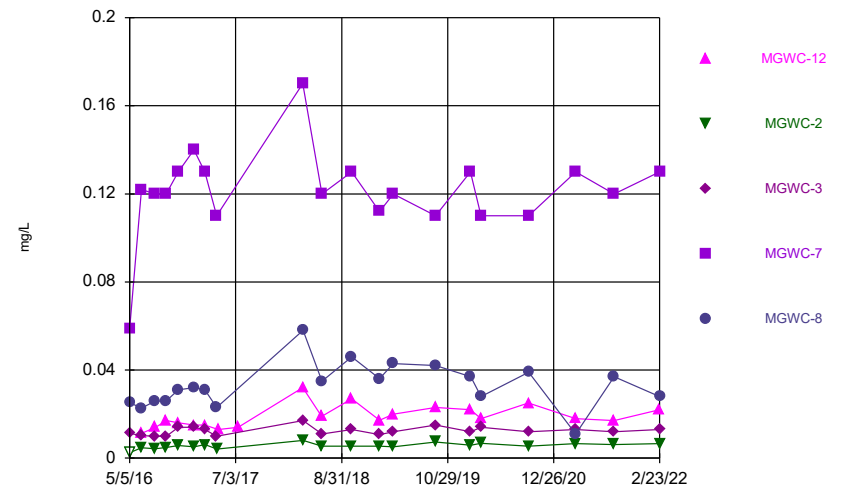
Constituent: Lead Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



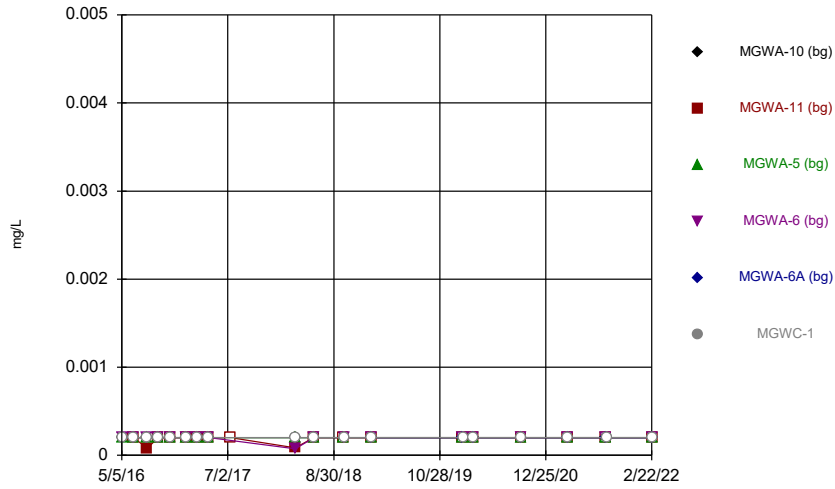
Constituent: Lithium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



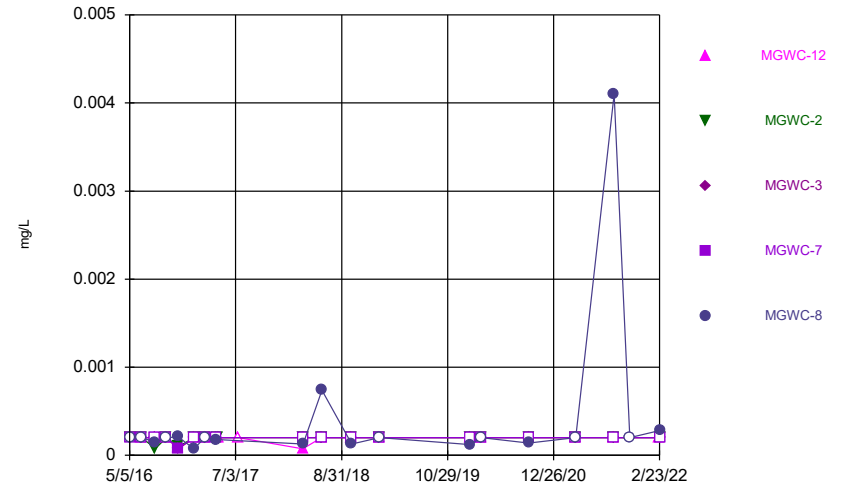
Constituent: Lithium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



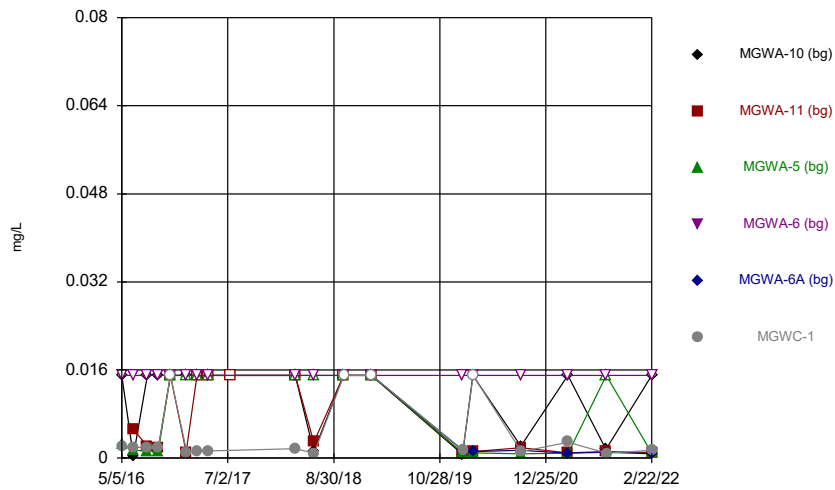
Constituent: Mercury Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



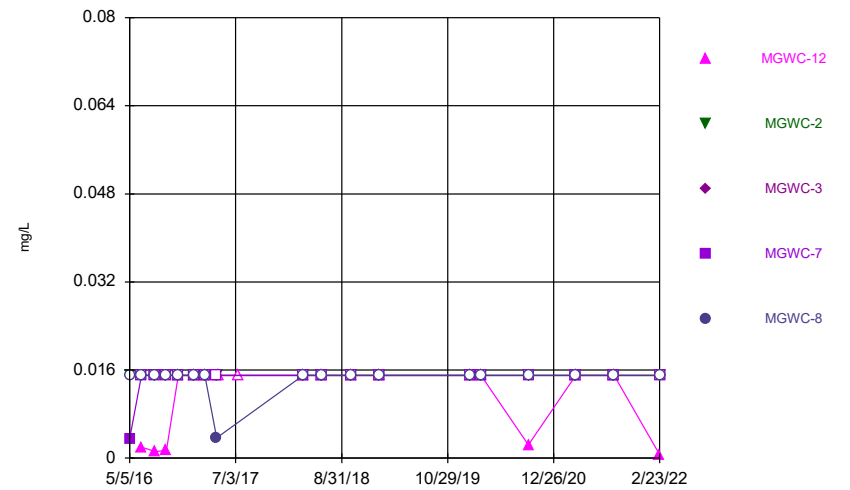
Constituent: Mercury Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



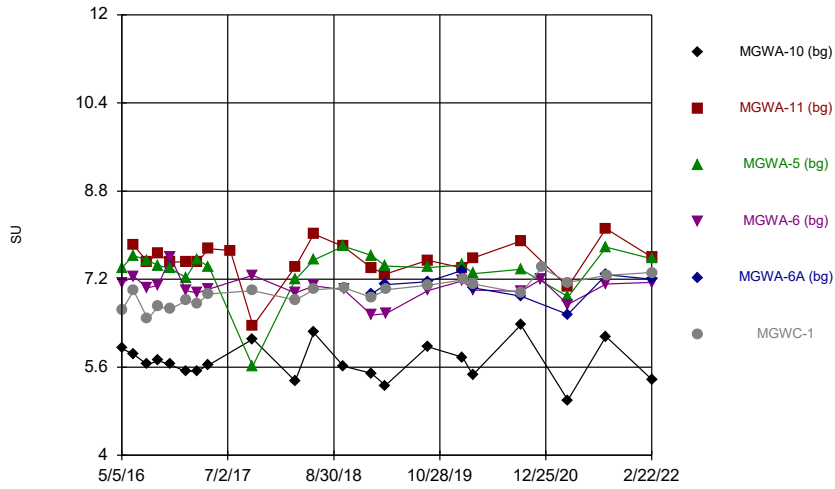
Constituent: Molybdenum Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



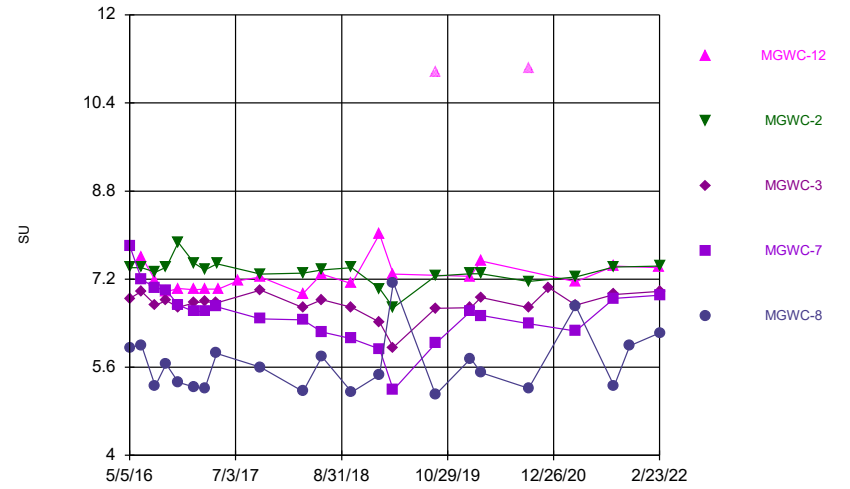
Constituent: Molybdenum Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



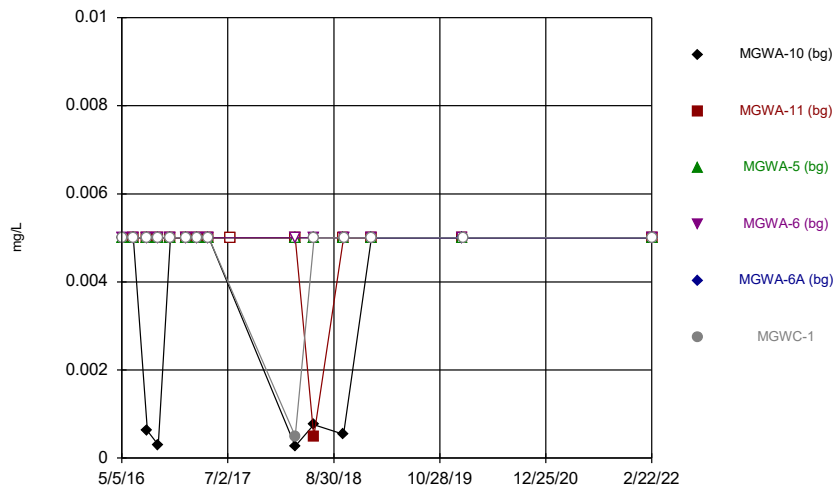
Constituent: pH Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



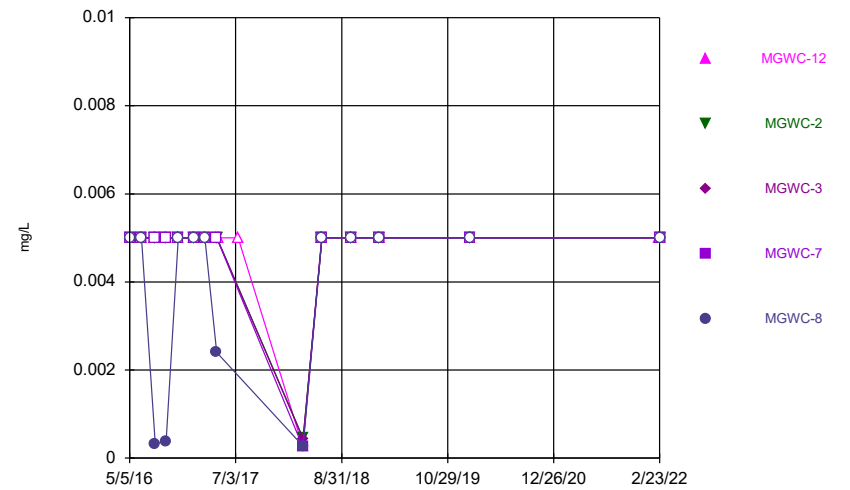
Constituent: pH Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



Constituent: Selenium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

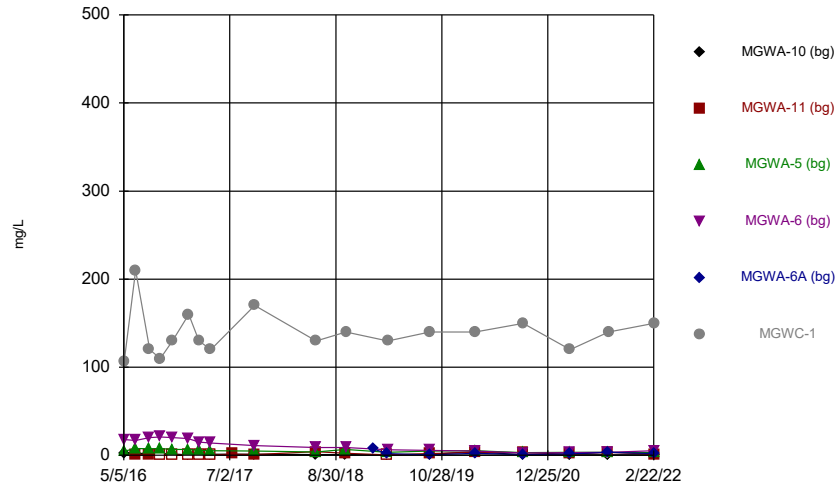
Time Series



Constituent: Selenium Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

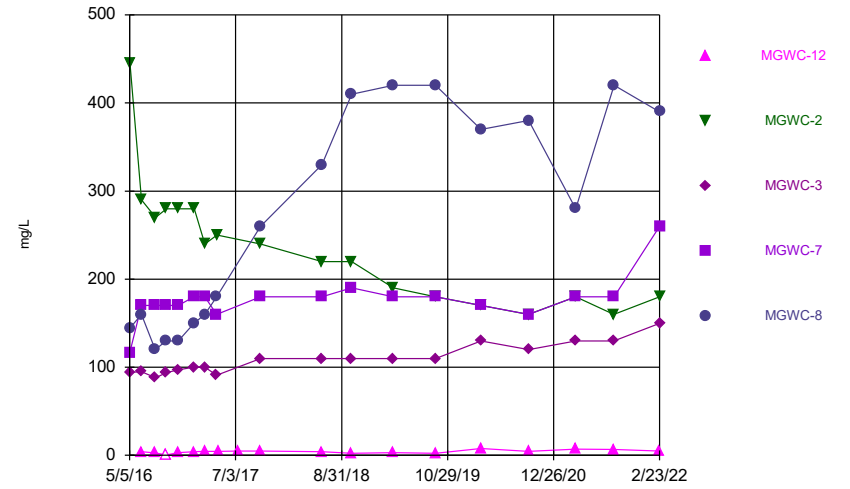


Time Series



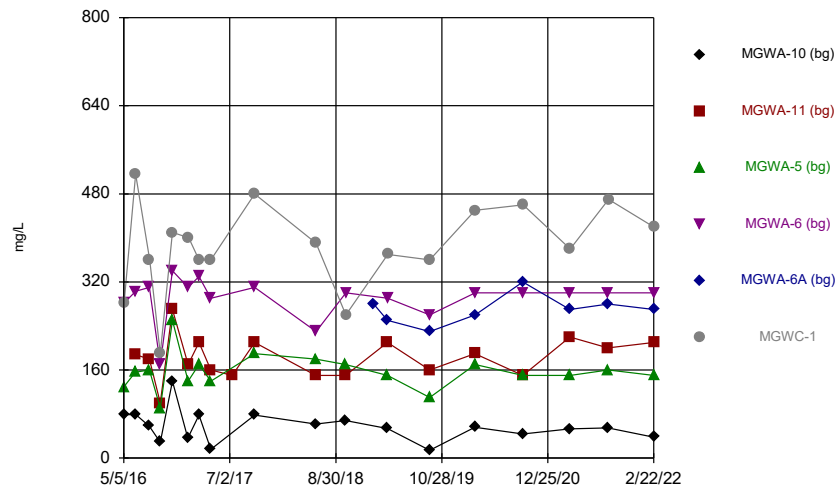
Constituent: Sulfate Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



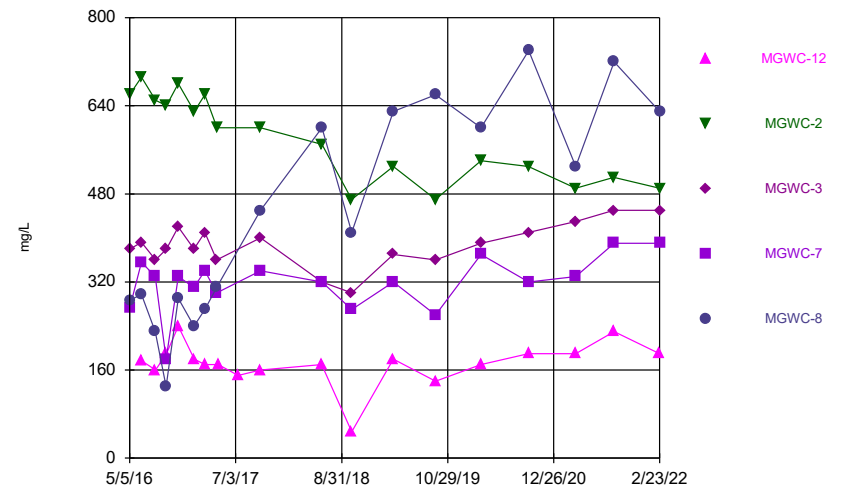
Constituent: Sulfate Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



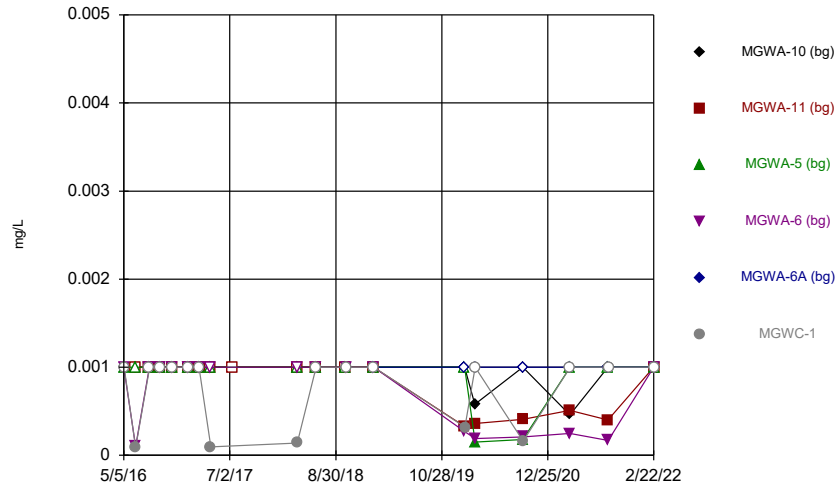
Constituent: TDS Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



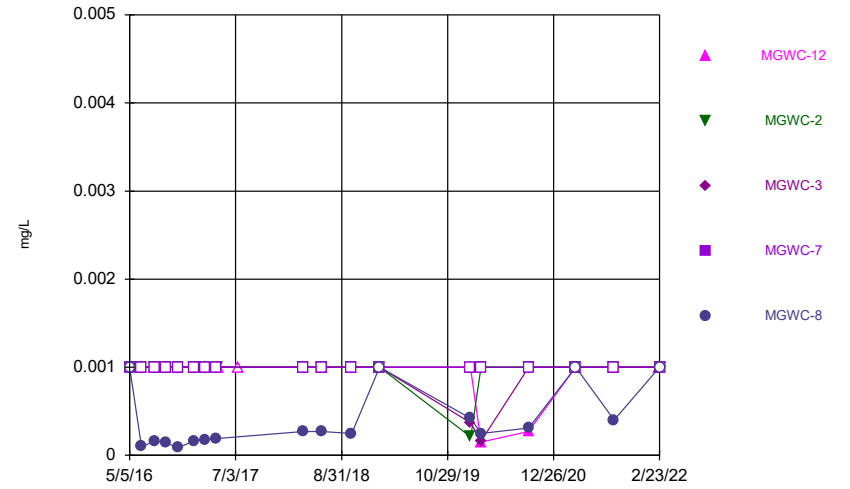
Constituent: TDS Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: Thallium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: Thallium Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



# Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.00197 (J)	<0.002
5/6/2016		<0.002	<0.002		
6/21/2016	0.0004 (J)	<0.002	0.0003 (J)	<0.002	<0.002
8/15/2016				<0.002	<0.002
8/16/2016	<0.002	<0.002	<0.002		
9/28/2016				<0.002	<0.002
9/29/2016	<0.002	<0.002	<0.002		
11/16/2016	<0.002	<0.002	<0.002	<0.002	<0.002
1/17/2017			<0.002	<0.002	<0.002
1/18/2017	<0.002	<0.002			
3/2/2017	<0.002	<0.002	<0.002	<0.002	<0.002
4/18/2017			<0.002	<0.002	<0.002
4/19/2017		<0.002			
4/25/2017	<0.002				
7/13/2017	<0.002				
3/29/2018	<0.002			<0.002	
3/30/2018		<0.002	<0.002		<0.002
1/29/2019	<0.002	<0.002	<0.002	<0.002	<0.002
1/28/2020	<0.002			<0.002	
1/29/2020		<0.002	<0.002		<0.002
3/10/2020	<0.002	<0.002	<0.002	<0.002	<0.002
9/16/2020	<0.002	<0.002			
9/17/2020			<0.002	<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002	<0.002	<0.002
8/24/2021		<0.002	<0.002		
8/25/2021	<0.002			<0.002	<0.002
2/22/2022	<0.002				
2/23/2022		<0.002	<0.002	<0.002	<0.002

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2022 1:19 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.001		<0.001	0.0343		
5/6/2016						0.00299 (J)
6/20/2016	0.00036 (J)	0.003 (J)	0.00014 (J)			
6/21/2016				0.0352		0.0047 (J)
8/15/2016	0.00096 (J)	0.0033	<0.001	0.035		
8/16/2016						0.003
9/28/2016	0.00095 (J)	0.0026	0.00062 (J)	0.033		0.0036
11/16/2016	<0.001	0.0013	<0.001	0.02		0.003
1/16/2017	<0.001					
1/17/2017		<0.001	<0.001	0.022		
1/19/2017						0.0024
3/2/2017	<0.001	0.0015	<0.001	0.021		0.0027
4/18/2017	<0.001	0.00071 (J)	<0.001	0.018		0.0024
7/13/2017		0.00066 (J)				
3/29/2018	<0.001	0.002	<0.001	0.014		0.0023
6/12/2018	<0.001	0.0017	<0.001			
6/13/2018				0.011		0.0021
10/9/2018	<0.001	0.00072 (J)	<0.001			
10/10/2018				0.014		0.0024
1/28/2019	<0.001	<0.001				
1/29/2019			<0.001	0.00972	0.0118	0.00255
3/25/2019	<0.001	0.0022	0.00069 (J)		0.0012 (J)	
3/26/2019				0.0097		0.002
9/10/2019	<0.001	0.0018	0.00039 (J)	0.0085	0.0021	0.0018
1/28/2020	<0.001	0.0014	0.00036 (J)	0.0063	0.0028	
1/29/2020						0.0021
3/9/2020	<0.001	0.00073 (J)				
3/10/2020			0.00031 (J)	0.0093	0.0029	0.0019
9/16/2020	<0.001	0.00069 (J)	0.00035 (J)	0.0089	0.011	
9/17/2020						0.002
3/23/2021	0.00033 (J)	0.0023		0.0089	0.0098	
3/24/2021			0.00033 (J)			0.0024
8/23/2021	<0.001	0.00077 (J)				
8/24/2021			<0.001	0.0087	0.0021	
8/25/2021						0.00092 (J)
2/22/2022	<0.001	0.0024	0.00052 (J)	0.011	0.013	0.0014

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.00143 (J)	<0.001
5/6/2016		<0.001	0.00154 (J)		
6/21/2016	0.0015 (J)	<0.001	0.0016 (J)	0.0009 (J)	<0.001
8/15/2016				0.0012 (J)	<0.001
8/16/2016	0.00082 (J)	<0.001	0.0017		
9/28/2016				0.00084 (J)	<0.001
9/29/2016	0.0019	<0.001	0.0013		
11/16/2016	0.0017	0.00068 (J)	0.0014	<0.001	<0.001
1/17/2017			0.00056 (J)	<0.001	<0.001
1/18/2017	0.00096 (J)	<0.001			
3/2/2017	0.00082 (J)	0.00065 (J)	0.0018	0.0009 (J)	<0.001
4/18/2017			0.0018	0.0005 (J)	0.00059 (J)
4/19/2017		<0.001			
4/25/2017	<0.001				
7/13/2017	0.00047 (J)				
3/29/2018	0.00053 (J)			0.00066 (J)	
3/30/2018		<0.001	0.0017		<0.001
6/12/2018	0.00063 (J)				
6/13/2018		<0.001	0.0015	<0.001	<0.001
10/10/2018	0.00098 (J)	<0.001	0.0016	<0.001	<0.001
1/29/2019	<0.001	<0.001	0.00143	<0.001	<0.001
3/26/2019	0.00079 (J)	<0.001	0.0012 (J)	<0.001	<0.001
9/10/2019	0.0011	0.00036 (J)	0.0017	0.00074 (J)	0.00056 (J)
1/28/2020	0.00051 (J)			0.00046 (J)	
1/29/2020		0.0004 (J)	0.0017		0.00047 (J)
3/10/2020	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/2020	<0.001	<0.001			
9/17/2020			0.0015	0.00045 (J)	<0.001
3/24/2021	<0.001	<0.001	0.0018	0.00046 (J)	0.00099 (J)
8/24/2021		<0.001	0.0014		
8/25/2021	<0.001			0.00055 (J)	<0.001
2/22/2022	0.00089 (J)				
2/23/2022		<0.001	0.0016	0.0004 (J)	0.00044 (J)

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2022 1:19 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.0376		0.0295	0.0595		
5/6/2016						0.11
6/20/2016	0.033	0.091	0.031			
6/21/2016				0.0539		0.165
8/15/2016	0.029	0.11	0.032	0.053		
8/16/2016						0.094
9/28/2016	0.032	0.12	0.038	0.06		0.1
11/16/2016	0.027	0.11	0.035	0.052		0.096
1/16/2017	0.022					
1/17/2017		0.11	0.039	0.051		
1/19/2017						0.12
3/2/2017	0.027	0.11	0.037	0.043		0.097
4/18/2017	0.024	0.1	0.035	0.042		0.092
7/13/2017		0.087				
3/29/2018	0.021	0.11	0.037	0.043		0.095
6/12/2018	0.025	0.068	0.036			
6/13/2018				0.037		0.096
10/9/2018	0.024	0.072	0.034			
10/10/2018				0.037		0.095
1/28/2019	0.0249	0.0834				
1/29/2019			0.0363	0.0393	0.0421	0.107
3/25/2019	0.023	0.11	0.035		0.044	
3/26/2019				0.033		0.096
9/10/2019	0.031	0.13	0.035	0.04	0.042	0.11
1/28/2020	0.025	0.13	0.034	0.034	0.037	
1/29/2020						0.11
3/9/2020	0.023	0.094				
3/10/2020			0.043	0.031	0.035	0.13
9/16/2020	0.025	0.078	0.037	0.028	0.034	
9/17/2020						0.11
3/23/2021	0.02	0.13		0.028	0.031	
3/24/2021			0.032			0.1
8/23/2021	0.024	0.096				
8/24/2021			0.027	0.026	0.026	
8/25/2021						0.11
2/22/2022	0.022	0.13	0.038	0.03	0.034	0.11

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.039	0.0364
5/6/2016		0.0605	0.151		
6/21/2016	0.0439	0.0613	0.174	0.0152	0.0386
8/15/2016				0.015	0.03
8/16/2016	0.041	0.052	0.13		
9/28/2016				0.014	0.034
9/29/2016	0.052	0.053	0.14		
11/16/2016	0.044	0.056	0.14	0.013	0.034
1/17/2017			0.16	0.014	0.038
1/18/2017	0.056	0.06			
3/2/2017	0.04	0.056	0.15	0.013	0.037
4/18/2017			0.14	0.011	0.04
4/19/2017		0.051			
4/25/2017	0.042				
7/13/2017	0.043				
3/29/2018	0.061			0.01	
3/30/2018		0.049	0.13		0.041
6/12/2018	0.063				
6/13/2018		0.05	0.14	0.0098	0.038
10/10/2018	0.071	0.046	0.13	0.011	0.035
1/29/2019	0.06	0.0496	0.138	<0.0025	0.0344
3/26/2019	0.06	0.048	0.13	0.0086	0.032
9/10/2019	0.073	0.053	0.15	0.012	0.035
1/28/2020	0.069			0.012	
1/29/2020		0.051	0.15		0.033
3/10/2020	0.056	0.049	0.15	0.013	0.036
9/16/2020	0.1	0.048			
9/17/2020			0.16	0.0091 (J)	0.028
3/24/2021	0.056	0.049	0.16	0.011	0.054
8/24/2021		0.047	0.16		
8/25/2021	0.051			0.013	0.031
2/22/2022	0.067				
2/23/2022		0.046	0.17	0.014	0.036





# Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0025	<0.0025
5/6/2016		<0.0025	<0.0025		
6/21/2016	<0.0025	<0.0025	<0.0025	<0.0025	0.0004 (J)
8/15/2016				<0.0025	0.00053 (J)
8/16/2016	<0.0025	<0.0025	<0.0025		
9/28/2016				<0.0025	0.00049 (J)
9/29/2016	<0.0025	<0.0025	<0.0025		
11/16/2016	<0.0025	<0.0025	<0.0025	<0.0025	0.0004 (J)
1/17/2017			<0.0025	<0.0025	0.00084 (J)
1/18/2017	<0.0025	<0.0025			
3/2/2017	<0.0025	<0.0025	<0.0025	<0.0025	0.00068 (J)
4/18/2017			<0.0025	<0.0025	0.00067 (J)
4/19/2017		<0.0025			
4/25/2017	<0.0025				
7/13/2017	<0.0025				
3/29/2018	<0.0025			<0.0025	
3/30/2018		<0.0025	<0.0025		0.0015 (J)
6/12/2018	<0.0025				
6/13/2018		<0.0025	<0.0025	<0.0025	0.0012 (J)
10/10/2018	<0.0025	<0.0025	<0.0025	<0.0025	0.0016 (J)
1/29/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
1/28/2020	<0.0025			<0.0025	
1/29/2020		<0.0025	0.00031 (J)		0.0019
3/10/2020	<0.0025	<0.0025	<0.0025	<0.0025	0.0013 (J)
9/16/2020	<0.0025	<0.0025			
9/17/2020			<0.0025	<0.0025	0.0019 (J)
3/24/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
8/24/2021		<0.0025	<0.0025		
8/25/2021	<0.0025			<0.0025	0.0015 (J)
2/22/2022	<0.0025				
2/23/2022		<0.0025	<0.0025	<0.0025	0.0014 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.08		<0.08	0.157		
5/6/2016						0.567
6/20/2016	0.011 (J)	0.017 (J)	0.013 (J)			
6/21/2016				0.124		1.55
8/15/2016	0.022 (J)	0.032 (J)	0.023 (J)	0.18		
8/16/2016						0.85
9/28/2016	0.023 (J)	0.021 (J)	<0.08	0.17		0.7
11/16/2016	<0.08	<0.08	<0.08	0.17		0.88
1/16/2017	0.021 (J)					
1/17/2017		<0.08	<0.08	0.17		
1/19/2017						1.5
3/2/2017	<0.08	<0.08	<0.08	0.14		0.89
4/18/2017	<0.08	<0.08	<0.08	0.14		1.1
7/13/2017		<0.08				
10/10/2017	0.021 (J)	0.025 (J)	<0.08	0.12		1.9
6/12/2018	<0.08	<0.08	<0.08			
6/13/2018				0.11		1.2
10/9/2018	<0.08	<0.08	<0.08			
10/10/2018				0.096 (J)		1.2
1/29/2019					<0.08	
3/25/2019	<0.08	<0.08	<0.08		<0.08	
3/26/2019				0.079 (J)		1.3
9/10/2019	<0.08	<0.08	<0.08	0.097	0.04 (J)	1.5
3/9/2020	0.045 (J)	<0.08				
3/10/2020			<0.08	0.051 (J)	<0.08	1.9
9/16/2020	<0.08	0.045 (J)	<0.08	0.041 (J)	0.04 (J)	
9/17/2020						1.8
3/23/2021	<0.08	0.047 (J)		<0.08	<0.08	
3/24/2021			<0.08			0.57
8/23/2021	<0.08	0.043 (J)				
8/24/2021			<0.08	<0.08	<0.08	
8/25/2021						1.7
2/22/2022	<0.08	<0.08	<0.08	<0.08	<0.08	1.7

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.855	0.976
5/6/2016		3.78	0.926		
6/21/2016	0.0201 (J)	3.1	0.792	1.15	0.862
8/15/2016				1.3	0.8
8/16/2016	0.055	2.8	1		
9/28/2016				1.3	0.8
9/29/2016	<0.08	3.1	1		
11/16/2016	0.055	3.9	1.2	1.3	0.98
1/17/2017			1.3	1.3	1.6
1/18/2017	0.097	3.7			
3/2/2017	0.064	3.3	1.3	1.3	1.8
4/18/2017			1.8	1.5	2.4
4/19/2017		3.7			
4/25/2017	<0.08				
7/13/2017	<0.08				
10/10/2017	<0.08	3.4	1.7	1.4	4.2
6/12/2018	<0.08				
6/13/2018		3	1.6	1.4	4.9
10/10/2018	0.034 (J)	3	1.6	1.4	5.1
3/26/2019	0.032 (J)	2.6	1.5	1.5	5.1
9/10/2019	0.06 (J)	2.4	1.5	1.5	4.8
3/10/2020	<0.08	2.3	1.3	1.4	4
9/16/2020	<0.08	2.1			
9/17/2020			1.2	1.4	4.4
3/24/2021	<0.08	2.4	1.2	1.5	3.6
8/24/2021		2.2	0.97		
8/25/2021	0.11			1.6	4.2
2/22/2022	<0.08				
2/23/2022		2	0.83	2.1	4.1



# Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0025	0.000784 (J)
5/6/2016		0.00166	<0.0025		
6/21/2016	<0.0025	0.0008 (J)	<0.0025	<0.0025	0.0003 (J)
8/15/2016				<0.0025	<0.0025
8/16/2016	<0.0025	0.0034	<0.0025		
9/28/2016				<0.0025	<0.0025
9/29/2016	<0.0025	0.0027	<0.0025		
11/16/2016	<0.0025	0.0022 (J)	<0.0025	<0.0025	<0.0025
1/17/2017			<0.0025	<0.0025	<0.0025
1/18/2017	<0.0025	0.008			
3/2/2017	<0.0025	0.005	<0.0025	<0.0025	<0.0025
4/18/2017			<0.0025	<0.0025	0.00044 (J)
4/19/2017		0.0011 (J)			
4/25/2017	<0.0025				
7/13/2017	<0.0025				
3/29/2018	<0.0025			<0.0025	
3/30/2018		0.0016 (J)	<0.0025		0.00058 (J)
6/12/2018	<0.0025				
6/13/2018		0.0016 (J)	<0.0025	<0.0025	0.00076 (J)
10/10/2018	<0.0025	0.001 (J)	<0.0025	<0.0025	0.00035 (J)
1/29/2019	<0.0025	0.00315	<0.0025	<0.0025	<0.0025
3/26/2019	<0.0025	0.0019 (J)	<0.0025	<0.0025	0.0005 (J)
9/10/2019	<0.0025	0.0011	<0.0025	<0.0025	0.00079 (J)
1/28/2020	<0.0025			<0.0025	
1/29/2020		0.0054	<0.0025		0.0009 (J)
3/10/2020	<0.0025	0.0011 (J)	<0.0025	<0.0025	0.0011 (J)
9/16/2020	<0.0025	0.00053 (J)			
9/17/2020			<0.0025	0.00023 (J)	0.00072 (J)
3/24/2021	<0.0025	0.0022 (J)	<0.0025	<0.0025	0.001 (J)
8/24/2021		0.00054 (J)	<0.0025		
8/25/2021	<0.0025			<0.0025	0.0046
2/22/2022	<0.0025				
2/23/2022		0.0039	<0.0025	<0.0025	0.0014 (J)

# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	8.83		27	105		
5/6/2016						92.5
6/20/2016	8.1	35.5	29.4			
6/21/2016				91.2		119
8/15/2016	6.1	34	26	94		
8/16/2016						84
9/28/2016	7.2	38	31	110		92
11/16/2016	5.2	33	26	98		83
1/16/2017	3.8					
1/17/2017		34	29	100		
1/19/2017						110
3/2/2017	5.4	35	28	100		89
4/18/2017	5	33	27	110		100
7/13/2017		30				
10/10/2017	4.8	39	31	110		120
6/12/2018	4.8	26	25			
6/13/2018				100		100
10/9/2018	4.5	29	29			
10/10/2018				100		100
1/29/2019					95.1	
3/25/2019	4.6	37	27		89	
3/26/2019				100		100
9/10/2019	4.9	36	27	110	86	110
3/9/2020	4	32				
3/10/2020			29	100	90	120
9/16/2020	6.8	30	28	100	93	
9/17/2020						110
3/23/2021	4	42		110	97	
3/24/2021			28			100
8/23/2021	5.8	34				
8/24/2021			27	100	83	
8/25/2021						120
2/22/2022	3.3	36	25	97	90	100

# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				45	41.2
5/6/2016		131	109		
6/21/2016	25.5	119	99.7	52.8	44.7
8/15/2016				50	27
8/16/2016	25	120	97		
9/28/2016				58	32
9/29/2016	30	140	100		
11/16/2016	26	120	94	50	27
1/17/2017			100	52	32
1/18/2017	32	130			
3/2/2017	26	120	99	52	33
4/18/2017			120	56	59
4/19/2017		120			
4/25/2017	26				
7/13/2017	26				
10/10/2017	28	130	110	56	74
6/12/2018	30				
6/13/2018		120	100	51	84
10/10/2018	35	120	96	51	87
3/26/2019	33	110	99	52	96
9/10/2019	33	110	99	53	97
3/10/2020	30	110	110	55	100
9/16/2020	25	110			
9/17/2020			110	48	100
3/24/2021	32	120	120	51	120
8/24/2021		110	110		
8/25/2021	31			59	96
2/22/2022	35				
2/23/2022		100	120	61	97



# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	7.35		6.51	9.67		
5/6/2016						13.2
6/20/2016	7	4.3	5.9			
6/21/2016				9.2		15
8/15/2016	7.5	4.1	6.4	10		
8/16/2016						14
9/28/2016	7	3.9	6.1	10		14
11/16/2016	7.5	4.1	6.1	10		14
1/16/2017	7.7					
1/17/2017		3.9	5.7	9.4		
1/19/2017						14
3/2/2017	6.9	3.5	5.3	8.6		13
4/18/2017	6.8	3.7	5.3	8.9		13
7/13/2017		4.2				
10/10/2017	6.9	3.4	5.3	8.3		14
6/12/2018	6.7	4.6	5.1			
6/13/2018				7		13
10/9/2018	7.1	4.5	5.6			
10/10/2018				6.9		14
1/29/2019					4.51	
3/25/2019	6.8	3.4	4.7		4.4	
3/26/2019				5.8		13
9/10/2019	7	3.5	5.1	6	4.2	13
3/9/2020	7.4	4.5				
3/10/2020			5.4	5.1	4	14
9/16/2020	7	4.6	5.2	4.3	3.7	
9/17/2020						14
3/23/2021	7.8	3.8		4	4.1	
3/24/2021			5.5			14
8/23/2021	7.3	4.4				
8/24/2021			5.5	4	3.9	
8/25/2021						14
2/22/2022	7.1	3.1	5.1	4	3.3	13

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				13	10.1
5/6/2016		41	12.5		
6/21/2016	4.4	20	13	13	10
8/15/2016				14	9.5
8/16/2016	4.6	20	13		
9/28/2016				13	9.2
9/29/2016	4.4	19	13		
11/16/2016	4.5	20	14	13	9.5
1/17/2017			14	13	10
1/18/2017	4.2	18			
3/2/2017	3.9	18	13	13	9.3
4/18/2017			13	12	10
4/19/2017		17			
4/25/2017	4				
7/13/2017	4				
10/10/2017	4	16	14	12	11
6/12/2018	4				
6/13/2018		16	13	12	11
10/10/2018	4.2	15	14	12	10
3/26/2019	3.8	14	14	11	11
9/10/2019	4.1	13	13	9.9	10
3/10/2020	4.1	12	15	10	12
9/16/2020	5.1	12			
9/17/2020			14	9.6	10
3/24/2021	5.7	13	14	10	18
8/24/2021		13	14		
8/25/2021	4.9			9.9	11
2/22/2022	4				
2/23/2022		13	14	9.8	11

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.00249 (J)		<0.002	<0.002		
5/6/2016						<0.002
6/20/2016	0.0026 (J)	0.00066 (J)	0.00024 (J)			
6/21/2016				<0.002		<0.002
8/15/2016	0.0029	<0.002	<0.002	<0.002		
8/16/2016						<0.002
9/28/2016	0.0027	<0.002	<0.002	<0.002		<0.002
11/16/2016	0.0026	<0.002	<0.002	<0.002		<0.002
1/16/2017	0.0029					
1/17/2017		<0.002	<0.002	<0.002		
1/19/2017						<0.002
3/2/2017	0.0063	0.003	0.0032	0.0032		0.0036
4/18/2017	0.0031	<0.002	<0.002	<0.002		<0.002
7/13/2017		<0.002				
3/29/2018	0.0039	<0.002	<0.002	<0.002		<0.002
6/12/2018	0.0038	<0.002	<0.002			
6/13/2018				<0.002		<0.002
10/9/2018	0.0037	<0.002	<0.002			
10/10/2018				<0.002		<0.002
1/28/2019	0.00545	<0.002				
1/29/2019			<0.002	<0.002	<0.002	<0.002
1/28/2020	0.0044	<0.002	<0.002	<0.002	<0.002	
1/29/2020						<0.002
3/9/2020	0.0042	<0.002				
3/10/2020			<0.002	<0.002	<0.002	<0.002
9/16/2020	0.0039	<0.002	<0.002	<0.002	<0.002	
9/17/2020						<0.002
3/23/2021	0.0043	<0.002		<0.002	<0.002	
3/24/2021			<0.002			<0.002
8/23/2021	0.0045	<0.002				
8/24/2021			<0.002	<0.002	<0.002	
8/25/2021						<0.002
2/22/2022	0.0039	<0.002	<0.002	<0.002	<0.002	<0.002

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.002	<0.002
5/6/2016		<0.002	<0.002		
6/21/2016	<0.002	<0.002	<0.002	<0.002	<0.002
8/15/2016				<0.002	<0.002
8/16/2016	<0.002	<0.002	<0.002		
9/28/2016				<0.002	<0.002
9/29/2016	<0.002	<0.002	<0.002		
11/16/2016	<0.002	<0.002	<0.002	<0.002	<0.002
1/17/2017			<0.002	<0.002	<0.002
1/18/2017	<0.002	<0.002			
3/2/2017	0.0032	0.0033	0.003	0.0034	0.0031
4/18/2017			<0.002	<0.002	<0.002
4/19/2017		<0.002			
4/25/2017	<0.002				
7/13/2017	<0.002				
3/29/2018	<0.002			<0.002	
3/30/2018		<0.002	<0.002		<0.002
6/12/2018	<0.002				
6/13/2018		<0.002	<0.002	<0.002	<0.002
10/10/2018	<0.002	<0.002	<0.002	<0.002	<0.002
1/29/2019	<0.002	<0.002	<0.002	<0.002	<0.002
1/28/2020	<0.002			0.0015 (J)	
1/29/2020		<0.002	<0.002		<0.002
3/10/2020	<0.002	<0.002	<0.002	<0.002	<0.002
9/16/2020	0.029	<0.002			
9/17/2020			<0.002	<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002	<0.002	<0.002
8/24/2021		<0.002	<0.002		
8/25/2021	<0.002			<0.002	<0.002
2/22/2022	<0.002				
2/23/2022		<0.002	<0.002	<0.002	<0.002

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.0025		<0.0025	<0.0025		
5/6/2016						<0.0025
6/20/2016	0.00018 (J)	3.9E-05 (J)	1.2E-05 (J)			
6/21/2016				0.0003 (J)		0.0012 (J)
8/15/2016	<0.0025	<0.0025	<0.0025	0.00049 (J)		
8/16/2016						0.00047 (J)
9/28/2016	<0.0025	<0.0025	<0.0025	0.00043 (J)		0.00058 (J)
11/16/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
1/16/2017	<0.0025					
1/17/2017		<0.0025	<0.0025	<0.0025		
1/19/2017						0.0004 (J)
3/2/2017	<0.0025	<0.0025	<0.0025	0.00046 (J)		<0.0025
4/18/2017	<0.0025	<0.0025	<0.0025	0.00044 (J)		<0.0025
7/13/2017		<0.0025				
3/29/2018	<0.0025	<0.0025	<0.0025	0.00065 (J)		<0.0025
6/12/2018	<0.0025	<0.0025	<0.0025			
6/13/2018				<0.0025		<0.0025
10/9/2018	<0.0025	<0.0025	<0.0025			
10/10/2018				0.00051 (J)		<0.0025
1/28/2019	<0.0025	<0.0025				
1/29/2019			<0.0025	<0.0025	<0.0025	<0.0025
3/25/2019	<0.0025	<0.0025	<0.0025		<0.0025	
3/26/2019				<0.0025		<0.0025
9/10/2019	0.00011 (J)	<0.0025	<0.0025	0.00037 (J)	0.0002 (J)	0.00032 (J)
1/28/2020	<0.0025	<0.0025	<0.0025	0.00041 (J)	0.00024 (J)	
1/29/2020						0.00027 (J)
3/9/2020	<0.0025	<0.0025				
3/10/2020			<0.0025	0.00038 (J)	0.00032 (J)	<0.0025
9/16/2020	<0.0025	<0.0025	<0.0025	<0.0025	0.00038 (J)	
9/17/2020						0.0002 (J)
3/23/2021	0.00014 (J)	<0.0025		0.00025 (J)	0.00036 (J)	
3/24/2021			<0.0025			<0.0025
8/23/2021	<0.0025	<0.0025				
8/24/2021			<0.0025	<0.0025	0.0017 (J)	
8/25/2021						0.00018 (J)
2/22/2022	<0.0025	<0.0025	<0.0025	<0.0025	0.00049 (J)	<0.0025

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.0036 (J)	0.00359 (J)
5/6/2016		0.00311 (J)	<0.0025		
6/21/2016	<0.0025	0.0031 (J)	0.0006 (J)	0.0097 (J)	0.0033 (J)
8/15/2016				0.0098	0.0038
8/16/2016	<0.0025	0.0034	0.00064 (J)		
9/28/2016				0.0095	0.0043
9/29/2016	<0.0025	0.0032	0.00054 (J)		
11/16/2016	<0.0025	0.0032	0.00041 (J)	0.0094	0.004
1/17/2017			0.00051 (J)	0.0099	0.0051
1/18/2017	<0.0025	0.0032			
3/2/2017	<0.0025	0.0042	0.00064 (J)	0.013	0.0064
4/18/2017			0.00057 (J)	0.0086	0.005
4/19/2017		0.0035			
4/25/2017	<0.0025				
7/13/2017	<0.0025				
3/29/2018	<0.0025			0.0088	
3/30/2018		0.0037	0.00068 (J)		0.015
6/12/2018	<0.0025				
6/13/2018		0.0035	0.00048 (J)	0.0093	0.014
10/10/2018	<0.0025	0.0034	0.00063 (J)	0.012	0.018
1/29/2019	<0.0025	0.00293	<0.0025	0.0103	0.0159
3/26/2019	<0.0025	0.003	<0.0025	0.009	0.02
9/10/2019	0.00016 (J)	0.0027	0.00065	0.011	0.019
1/28/2020	<0.0025			0.008	
1/29/2020		0.003	0.00067		0.025
3/10/2020	<0.0025	0.0024 (J)	0.0005 (J)	0.0081	0.017
9/16/2020	0.0015 (J)	0.002 (J)			
9/17/2020			0.00053 (J)	0.0098	0.024
3/24/2021	<0.0025	0.0019 (J)	0.00053 (J)	0.0063	0.002 (J)
8/24/2021		0.0018 (J)	0.00034 (J)		
8/25/2021	<0.0025			0.0032	0.021
2/22/2022	<0.0025				
2/23/2022		0.0016 (J)	0.0012 (J)	0.007	0.015

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.879		0.48	0.694		
5/6/2016						1.07
6/20/2016	0.305 (U)	0.556 (U)	0.184			
6/21/2016				0.511 (U)		2.01
8/15/2016	0.577	0.72	0.577	0.467		
8/16/2016						1.12
9/28/2016	0.77	0.521 (U)	0.107 (U)	0.926		1.09
11/16/2016	0.427 (U)	0.322 (U)	0.333 (U)	0.863		1.58
1/16/2017	1.1					
1/17/2017		1.26	0.511 (U)	0.82		
1/19/2017						1.64
3/2/2017	1.01	0.47	0.105 (U)	0.236 (U)		1.08
4/18/2017	0.635	0.233 (U)	0.279 (U)	0.316 (U)		1.23
7/13/2017		0.679				
3/29/2018	0.799	0.723	0.37	0.6		1.21
6/12/2018	0.313 (U)	0.105 (U)	0.133 (U)			
6/13/2018				0.349 (U)		1.09
10/9/2018	1.11	0.65	0.85			
10/10/2018				1.01		1.95
1/28/2019	0.872	0.478				
1/29/2019			0.275 (U)	0.591	0.874	1.11
3/25/2019	0.526	0.717	0.629		0.646	
3/26/2019				0.4		1
9/10/2019	0.612	0.377 (U)	0.354 (U)	0.481	0.988	1.26
1/28/2020	0.322 (U)	0.528	0.0677 (U)	0.374 (U)	0.0609 (U)	
1/29/2020						1.39
3/9/2020	0.761	0.00483 (U)				
3/10/2020			0.0594 (U)	0.41 (U)	0.528	1.4
9/16/2020	0.969	0.583	0.821	-0.0651 (U)	1.13	
9/17/2020						1.79
12/7/2020				0.979		
12/8/2020						1.87
3/23/2021	0.657	0.409 (U)		0.542	0.612	
3/24/2021			0.206 (U)			1.81
8/23/2021	0.752	1.19				
8/24/2021			0.521 (U)	0.678	0.596	
8/25/2021						2.12
2/22/2022	1.06	0.837	0.511	0.594	0.728	1.85

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.75	1.21
5/6/2016		0.633	1.41		
6/21/2016	0.292 (U)	1.19 (U)	1.71	1.01	0.895 (U)
8/15/2016				1.3	1.64
8/16/2016	0.232 (U)	0.516	1.75		
9/28/2016				1.06	2.17
9/29/2016	1.11	0.665	1.43		
11/16/2016	0.798	0.694	1.9	0.855	1.49
1/17/2017			1.9	1.59	1.75
1/18/2017	0.302 (U)	0.688			
3/2/2017	0.437	0.484	1.37	1.4	1.03
4/18/2017			1.42	0.684	1.83
4/19/2017		0.599			
4/25/2017	0.391				
7/13/2017	0.47				
3/29/2018	0.736			0.822	
3/30/2018		0.677	1.43		2.15
6/12/2018	0.438				
6/13/2018		0.272 (U)	1.27	0.716	1.51
10/10/2018	0.371	0.336	1.54	1.51	2.72
1/29/2019	0.639	0.719	1.34	1.7	1.93
3/26/2019	0.607	0.41 (U)	1.25	0.784	1.79
9/10/2019	0.939	0.548	1.6	0.958	1.78
1/28/2020	0.465			1.38	
1/29/2020		0.0985 (U)	1.44		1.61
3/10/2020	0.34 (U)	0.589	1.32	0.903	1.95
9/16/2020	1.09	1.11			
9/17/2020			0.666 (U)	1.28	1.56
12/8/2020			1.65		
3/24/2021	0.434 (U)	0.625	1.58	1.2	0.636
8/24/2021		0.313 (U)	1.65		
8/25/2021	0.563			0.767	2.13
2/22/2022	0.888				
2/23/2022		0.598	1.47	1.42	2.62



# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.046 (J)		0.132 (J)	0.091 (J)		
5/6/2016						0.28 (J)
6/20/2016	<0.1	0.06 (J)	0.05 (J)			
6/21/2016				0.08 (J)		0.36
8/15/2016	<0.1	0.1 (J)	0.1 (J)	<0.1		
8/16/2016						0.27
9/28/2016	<0.1	0.097 (J)	0.11 (J)	0.084 (J)		0.26
11/16/2016	<0.1	0.12 (J)	0.093 (J)	0.084 (J)		0.24
1/16/2017	<0.1					
1/17/2017		0.11 (J)	0.095 (J)	0.099 (J)		
1/19/2017						0.22
3/2/2017	0.12 (J)	0.18 (J)	0.16 (J)	0.15 (J)		0.27
4/18/2017	<0.1	0.11 (J)	<0.1	<0.1		0.2
7/13/2017		0.12 (J)				
10/10/2017	<0.1	0.086 (J)	<0.1	<0.1		0.18 (J)
3/29/2018	<0.1	<0.1	0.084 (J)	<0.1		0.16 (J)
6/12/2018	<0.1	0.16 (J)	<0.1			
6/13/2018				<0.1		0.14 (J)
10/9/2018	<0.1	0.16 (J)	0.086 (J)			
10/10/2018				<0.1		0.17 (J)
1/29/2019					<0.1	
3/25/2019	<0.1	0.087 (J)	0.072 (J)		0.067 (J)	
3/26/2019				0.065 (J)		0.16
9/10/2019	0.044 (J)	0.075 (J)	0.068 (J)	0.076 (J)	0.052 (J)	0.098 (J)
3/9/2020	0.061 (J)	0.19				
3/10/2020			0.055 (J)	0.045 (J)	0.048 (J)	0.086 (J)
9/16/2020	0.042 (J)	0.18	0.08 (J)	0.076 (J)	0.078 (J)	
9/17/2020						0.15
3/23/2021	0.038 (J)	0.081 (J)		0.082 (J)	0.096 (J)	
3/24/2021			0.091 (J)			0.27
8/23/2021	0.048 (J)	0.12				
8/24/2021			0.1	0.1	0.11	
8/25/2021						0.097 (J)
2/22/2022	<0.1	<0.1	<0.1	0.034 (J)	<0.1	0.047 (J)

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.394	0.103 (J)
5/6/2016		0.088 (J)	0.086 (J)		
6/21/2016	0.14 (J)	0.19 (J)	0.23 (J)	0.49	0.1 (J)
8/15/2016				0.44	0.11 (J)
8/16/2016	0.29	0.087 (J)	<0.1		
9/28/2016				0.4	0.1 (J)
9/29/2016	0.26	<0.1	0.082 (J)		
11/16/2016	0.25	<0.1	0.087 (J)	0.36	0.091 (J)
1/17/2017			0.086 (J)	0.2	<0.1
1/18/2017	0.26	<0.1			
3/2/2017	0.28	0.15 (J)	0.15 (J)	0.36	0.16 (J)
4/18/2017			<0.1	0.29	<0.1
4/19/2017		<0.1			
4/25/2017	0.25				
7/13/2017	0.21				
10/10/2017	0.22	<0.1	<0.1	0.28	<0.1
3/29/2018	0.23			0.23	
3/30/2018		<0.1	<0.1		0.088 (J)
6/12/2018	0.23				
6/13/2018		<0.1	<0.1	0.2	0.15 (J)
10/10/2018	0.25	0.085 (J)	<0.1	0.23	0.11 (J)
3/26/2019	0.22	0.076 (J)	0.072 (J)	0.19 (J)	0.088 (J)
9/10/2019	0.2	0.07 (J)	0.073 (J)	0.15	0.083 (J)
3/10/2020	0.15	0.05 (J)	0.058 (J)	0.18	0.084 (J)
9/16/2020	0.26	0.076 (J)			
9/17/2020			0.083 (J)	0.25	0.11
3/24/2021	0.27	0.11	0.092 (J)	0.35	0.11
8/24/2021		0.095 (J)	0.11		
8/25/2021	0.19			0.15	0.038 (J)
2/22/2022	0.093 (J)				
2/23/2022		0.075 (J)	0.086 (J)	0.22	0.05 (J)



# Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.001	<0.001
5/6/2016		<0.001	<0.001		
6/21/2016	0.0001 (J)	<0.001	<0.001	0.0003 (J)	<0.001
8/15/2016				<0.001	<0.001
8/16/2016	<0.001	<0.001	<0.001		
9/28/2016				<0.001	<0.001
9/29/2016	<0.001	<0.001	<0.001		
11/16/2016	<0.001	<0.001	<0.001	<0.001	<0.001
1/17/2017			<0.001	<0.001	<0.001
1/18/2017	<0.001	<0.001			
3/2/2017	<0.001	<0.001	<0.001	<0.001	<0.001
4/18/2017			<0.001	<0.001	<0.001
4/19/2017		<0.001			
4/25/2017	<0.001				
7/13/2017	<0.001				
3/29/2018	<0.001			<0.001	
3/30/2018		<0.001	<0.001		<0.001
1/29/2019	<0.001	<0.001	<0.001	<0.001	<0.001
1/28/2020	<0.001			<0.001	
1/29/2020		<0.001	<0.001		<0.001
3/10/2020	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/2020	<0.001	<0.001			
9/17/2020			<0.001	<0.001	<0.001
3/24/2021	<0.001	<0.001	<0.001	<0.001	<0.001
8/24/2021		<0.001	<0.001		
8/25/2021	<0.001			0.00019 (J)	0.00022 (J)
2/22/2022	<0.001				
2/23/2022		<0.001	<0.001	<0.001	<0.001

# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2022 1:20 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.005		<0.005	<0.005		
5/6/2016						0.0128 (J)
6/20/2016	0.0071 (J)	0.014 (J)	0.0065 (J)			
6/21/2016				<0.005		0.0102 (J)
8/15/2016	0.0065	0.02	0.0059	<0.005		
8/16/2016						0.012
9/28/2016	0.0075	0.019	0.0075	<0.005		0.012
11/16/2016	0.0081	0.021	0.0094	<0.005		0.013
1/16/2017	0.0076					
1/17/2017		0.02	0.01	<0.005		
1/19/2017						0.011
3/2/2017	0.0073	0.019	0.0076	<0.005		0.013
4/18/2017	0.006	0.016	0.008	<0.005		0.0097
7/13/2017		0.011				
3/29/2018	0.01 (J)	0.03 (J)	0.014 (J)	<0.005		0.017 (J)
6/12/2018	0.0068	0.012	0.0095			
6/13/2018				<0.005		0.0094
10/9/2018	0.0082	0.015	0.011			
10/10/2018				<0.005		0.011
1/28/2019	0.00821	0.0124				
1/29/2019			0.00987	<0.005	0.0184	0.0109
3/25/2019	0.0068	0.026	0.01		0.0052	
3/26/2019				<0.005		0.01
9/10/2019	0.011	0.026	0.011	0.0051	0.0062	0.012
1/28/2020	0.0064	0.026	0.0093	<0.005	<0.005	
1/29/2020						0.0096
3/9/2020	0.0088	0.017				
3/10/2020			0.011	<0.005	<0.005	<0.005
9/16/2020	0.0079	0.014	0.0094	<0.005	<0.005	
9/17/2020						0.0086
3/23/2021	0.0084	0.026		<0.005	<0.005	
3/24/2021			0.0097			0.013
8/23/2021	0.0075	0.018				
8/24/2021			0.0093	<0.005	<0.005	
8/25/2021						0.0096
2/22/2022	0.0079	0.027	0.011	<0.005	0.0012 (J)	0.01

# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.0586	0.0252 (J)
5/6/2016		<0.005	0.0113 (J)		
6/21/2016	0.0112 (J)	0.0047 (J)	0.0103 (J)	0.122	0.0228 (J)
8/15/2016				0.12	0.026
8/16/2016	0.014	0.0043 (J)	0.01		
9/28/2016				0.12	0.026
9/29/2016	0.017	0.0048 (J)	0.01		
11/16/2016	0.016	0.0058	0.014	0.13	0.031
1/17/2017			0.014	0.14	0.032
1/18/2017	0.015	0.0051			
3/2/2017	0.015	0.0061	0.013	0.13	0.031
4/18/2017			0.01	0.11	0.023
4/19/2017		0.0042 (J)			
4/25/2017	0.013				
7/13/2017	0.014				
3/29/2018	0.032 (J)			0.17 (J)	
3/30/2018		0.008 (J)	0.017 (J)		0.058 (J)
6/12/2018	0.019				
6/13/2018		0.0054	0.011	0.12	0.035
10/10/2018	0.027	0.0055	0.013	0.13	0.046
1/29/2019	0.0172	0.00537	0.0106	0.112	0.0361
3/26/2019	0.02	0.0051	0.012	0.12	0.043
9/10/2019	0.023	0.0074	0.015	0.11	0.042
1/28/2020	0.022			0.13	
1/29/2020		0.0059	0.012		0.037
3/10/2020	0.018	0.0068	0.014	0.11	0.028
9/16/2020	0.025	0.0055			
9/17/2020			0.012	0.11	0.039
3/24/2021	0.018	0.0066	0.013	0.13	0.011
8/24/2021		0.0062	0.012		
8/25/2021	0.017			0.12	0.037
2/22/2022	0.022				
2/23/2022		0.0066	0.013	0.13	0.028



# Time Series

Constituent: Mercury (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0002	<0.0002
5/6/2016		<0.0002	<0.0002		
6/21/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/15/2016				<0.0002	0.00015 (J)
8/16/2016	<0.0002	7.8E-05 (J)	<0.0002		
9/28/2016				<0.0002	<0.0002
9/29/2016	<0.0002	<0.0002	<0.0002		
11/16/2016	8.6E-05 (J)	0.0001 (J)	7E-05 (J)	8E-05 (J)	0.00021
1/17/2017			<0.0002	<0.0002	7.6E-05 (J)
1/18/2017	<0.0002	<0.0002			
3/2/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4/18/2017			<0.0002	<0.0002	0.00018 (J)
4/19/2017		<0.0002			
4/25/2017	<0.0002				
7/13/2017	<0.0002				
3/29/2018	7.4E-05 (J)			<0.0002	
3/30/2018		<0.0002	<0.0002		0.00013 (J)
6/12/2018	<0.0002				
6/13/2018		<0.0002	<0.0002	<0.0002	0.00074
10/10/2018	<0.0002	<0.0002	<0.0002	<0.0002	0.00013 (J)
1/29/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/28/2020	<0.0002			<0.0002	
1/29/2020		<0.0002	<0.0002		0.00012 (J)
3/10/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002	<0.0002			
9/17/2020			<0.0002	<0.0002	0.00014 (J)
3/24/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/24/2021		<0.0002	<0.0002		
8/25/2021	<0.0002			<0.0002	0.0041
10/26/2021					<0.0002
2/22/2022	<0.0002				
2/23/2022		<0.0002	<0.0002	<0.0002	0.00028



# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.015		0.0026 (J)	<0.015		
5/6/2016						0.0021 (J)
6/20/2016	0.00031 (J)	0.0052 (J)	0.0014 (J)			
6/21/2016				<0.015		0.002 (J)
8/15/2016	<0.015	0.0022 (J)	0.0013 (J)	<0.015		
8/16/2016						0.0019 (J)
9/28/2016	<0.015	0.0018 (J)	0.0012 (J)	<0.015		0.0018 (J)
11/16/2016	<0.015	<0.015	<0.015	<0.015		<0.015
1/16/2017	<0.015					
1/17/2017		0.0011 (J)	<0.015	<0.015		
1/19/2017						0.0011 (J)
3/2/2017	<0.015	<0.015	<0.015	<0.015		0.0012 (J)
4/18/2017	<0.015	<0.015	<0.015	<0.015		0.0013 (J)
7/13/2017		<0.015				
3/29/2018	<0.015	<0.015	<0.015	<0.015		0.0017 (J)
6/12/2018	0.0012 (J)	0.0029 (J)	<0.015			
6/13/2018				<0.015		0.00087 (J)
10/9/2018	<0.015	<0.015	<0.015			
10/10/2018				<0.015		<0.015
1/28/2019	<0.015	<0.015				
1/29/2019			<0.015	<0.015	<0.015	<0.015
1/28/2020	0.00064 (J)	0.00085 (J)	0.00095 (J)	<0.015	0.0014 (J)	
1/29/2020						0.0015 (J)
3/9/2020	<0.015	0.0012 (J)				
3/10/2020			0.00093 (J)	<0.015	0.0012 (J)	<0.015
9/16/2020	0.0022 (J)	0.0019 (J)	0.00079 (J)	<0.015	0.0014 (J)	
9/17/2020						0.0012 (J)
3/23/2021	<0.015	0.00093 (J)		<0.015	0.00089 (J)	
3/24/2021			0.00089 (J)			0.0029 (J)
8/23/2021	0.0016 (J)	0.0012 (J)				
8/24/2021			<0.015	<0.015	0.0011 (J)	
8/25/2021						0.00088 (J)
2/22/2022	<0.015	0.001 (J)	0.00091 (J)	<0.015	0.00078 (J)	0.0014 (J)

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.00351 (J)	<0.015
5/6/2016		<0.015	<0.015		
6/21/2016	0.002 (J)	<0.015	<0.015	<0.015	<0.015
8/15/2016				<0.015	<0.015
8/16/2016	0.0012 (J)	<0.015	<0.015		
9/28/2016				<0.015	<0.015
9/29/2016	0.0014 (J)	<0.015	<0.015		
11/16/2016	<0.015	<0.015	<0.015	<0.015	<0.015
1/17/2017			<0.015	<0.015	<0.015
1/18/2017	<0.015	<0.015			
3/2/2017	<0.015	<0.015	<0.015	<0.015	<0.015
4/18/2017			<0.015	<0.015	0.0037 (J)
4/19/2017		<0.015			
4/25/2017	<0.015				
7/13/2017	<0.015				
3/29/2018	<0.015			<0.015	
3/30/2018		<0.015	<0.015		<0.015
6/12/2018	<0.015				
6/13/2018		<0.015	<0.015	<0.015	<0.015
10/10/2018	<0.015	<0.015	<0.015	<0.015	<0.015
1/29/2019	<0.015	<0.015	<0.015	<0.015	<0.015
1/28/2020	<0.015			<0.015	
1/29/2020		<0.015	<0.015		<0.015
3/10/2020	<0.015	<0.015	<0.015	<0.015	<0.015
9/16/2020	0.0024 (J)	<0.015			
9/17/2020			<0.015	<0.015	<0.015
3/24/2021	<0.015	<0.015	<0.015	<0.015	<0.015
8/24/2021		<0.015	<0.015		
8/25/2021	<0.015			<0.015	<0.015
2/22/2022	0.00064 (J)				
2/23/2022		<0.015	<0.015	<0.015	<0.015

# Time Series

Constituent: pH (SU) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	5.94		7.4	7.13		
5/6/2016						6.64
6/20/2016	5.84 (D)	7.82	7.63			
6/21/2016				7.25		6.99
8/15/2016	5.65	7.52	7.54	7.04		
8/16/2016						6.48
9/28/2016	5.72	7.66	7.45	7.09		6.7
11/16/2016	5.65	7.51	7.39	7.6		6.66
1/16/2017	5.52					
1/17/2017		7.52	7.23	6.99		
1/19/2017						6.81
3/2/2017	5.53	7.5	7.55	6.95		6.75
4/18/2017	5.64	7.75	7.43	7.02		6.93
7/13/2017		7.72				
10/10/2017			5.62	7.27		6.99
10/11/2017	6.11	6.35				
3/29/2018	5.35	7.42	7.19	6.95		6.82
6/12/2018	6.23	8.02	7.55			
6/13/2018				7.08		7.01
10/9/2018	5.62 (D)	7.79 (D)	7.8 (D)			
10/10/2018				7.01 (D)		7.04 (D)
1/28/2019	5.49 (D)	7.4 (D)				
1/29/2019			7.63 (D)	6.55 (D)	6.93 (D)	6.87 (D)
3/25/2019	5.27 (D)	7.29 (D)	7.44 (D)		7.1 (D)	
3/26/2019				6.57 (D)		7.01 (D)
9/10/2019	5.97	7.54	7.41	6.99	7.15	7.09
1/28/2020	5.78	7.4	7.46	7.17	7.36	
1/29/2020						7.19
3/9/2020	5.46	7.58				
3/10/2020			7.3	7	7.04	7.11
9/16/2020	6.37	7.89	7.38	6.98	6.89	
9/17/2020						6.95
12/7/2020				7.2		
12/8/2020						7.41
3/23/2021	5	7.06		6.74	6.56	
3/24/2021			6.88			7.14
8/23/2021	6.16	8.12				
8/24/2021			7.78	7.11	7.28	
8/25/2021						7.27
2/22/2022	5.38	7.6	7.57	7.14	7.2	7.32

# Time Series

Constituent: pH (SU) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				7.81	5.96
5/6/2016		7.41	6.85		
6/21/2016	7.61	7.41	6.98	7.2	6
8/15/2016				7.04	5.26
8/16/2016	7.17	7.33	6.73		
9/28/2016				7	5.66
9/29/2016	6.97	7.42	6.81		
11/16/2016	7.03	7.87	6.69	6.73	5.33
1/17/2017			6.77	6.61	5.24
1/18/2017	7.01	7.49			
3/2/2017	7.02	7.37	6.79	6.62	5.21
4/18/2017			6.77	6.7	5.85
4/19/2017		7.48			
4/25/2017	7.02				
7/13/2017	7.17				
10/10/2017	7.24	7.29	7	6.48	5.6
3/29/2018	6.93			6.46	
3/30/2018		7.31	6.68		5.16
6/12/2018	7.29				
6/13/2018		7.37	6.83	6.24	5.79
10/10/2018	7.12 (D)	7.41 (D)	6.69 (D)	6.12 (D)	5.15 (D)
1/29/2019	8.02 (D)	7.03 (D)	6.42 (D)	5.93 (D)	5.46 (D)
3/26/2019	7.29 (D)	6.68 (D)	5.96 (D)	5.19 (D)	7.14 (D)
9/10/2019	10.96 (o)	7.26	6.67	6.03	5.1
1/28/2020	7.25			6.61	
1/29/2020		7.3	6.68		5.76
3/10/2020	7.53	7.3	6.87	6.54	5.5
9/16/2020	11.03 (o)	7.16			
9/17/2020			6.68	6.39	5.22
12/8/2020			7.04		
3/24/2021	7.15	7.24	6.73	6.26	6.71
8/24/2021		7.42	6.92		
8/25/2021	7.44			6.85	5.26
10/26/2021					5.99
2/22/2022	7.41				
2/23/2022		7.44	6.98	6.91	6.22



# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.005	<0.005
5/6/2016		<0.005	<0.005		
6/21/2016	<0.005	<0.005	<0.005	<0.005	<0.005
8/15/2016				<0.005	0.00033 (J)
8/16/2016	<0.005	<0.005	<0.005		
9/28/2016				<0.005	0.00038 (J)
9/29/2016	<0.005	<0.005	<0.005		
11/16/2016	<0.005	<0.005	<0.005	<0.005	<0.005
1/17/2017			<0.005	<0.005	<0.005
1/18/2017	<0.005	<0.005			
3/2/2017	<0.005	<0.005	<0.005	<0.005	<0.005
4/18/2017			<0.005	<0.005	0.0024
4/19/2017		<0.005			
4/25/2017	<0.005				
7/13/2017	<0.005				
3/29/2018	0.00027 (J)			0.00026 (J)	
3/30/2018		0.00045 (J)	0.00044 (J)		0.00027 (J)
6/12/2018	<0.005				
6/13/2018		<0.005	<0.005	<0.005	<0.005
10/10/2018	<0.005	<0.005	<0.005	<0.005	<0.005
1/29/2019	<0.005	<0.005	<0.005	<0.005	<0.005
1/28/2020	<0.005			<0.005	
1/29/2020		<0.005	<0.005		<0.005
2/22/2022	<0.005				
2/23/2022		<0.005	<0.005	<0.005	<0.005

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	2.46		4.47	17.8		
5/6/2016						106
6/20/2016	2.5	1	7.7			
6/21/2016				17		210
8/15/2016	1.9	0.73 (J)	7.5	20		
8/16/2016						120
9/28/2016	1.9	<1	7.8	21		110
11/16/2016	1.7	<1	6.7	20		130
1/16/2017	<1					
1/17/2017		<1	6.7	19		
1/19/2017						160
3/2/2017	1.4	<1	5.6	15		130
4/18/2017	1.3	<1	5.1	14		120
7/13/2017		1.4				
10/10/2017	1.1	0.87 (J)	4.9	11		170
6/12/2018	0.82 (J)	4.1	3.8			
6/13/2018				8.7		130
10/9/2018	0.82 (J)	2.2	6.7			
10/10/2018				8.7		140
1/29/2019					7.08	
3/25/2019	<1	<1	3.4 (J)		1.8 (J)	
3/26/2019				6.3 (J)		130
9/10/2019	1.1	1.8	4.7	5.6	0.6 (J)	140
3/9/2020	4.2	3.4				
3/10/2020			5.2	5	2.4	140
9/16/2020	0.69 (J)	3	3.2	2.7	1	
9/17/2020						150
3/23/2021	<1	1.4		3.2	1.7	
3/24/2021			3.5			120
8/23/2021	<1	3.4				
8/24/2021			3.6	3.5	3.3	
8/25/2021						140
2/22/2022	<1	1.1	3.2	5.4	2.1	150

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				116	144
5/6/2016		445	94.2		
6/21/2016	4	290	95	170	160
8/15/2016				170	120
8/16/2016	2.8	270	88		
9/28/2016				170	130
9/29/2016	<1	280	94		
11/16/2016	3	280	97	170	130
1/17/2017			100	180	150
1/18/2017	4.1	280			
3/2/2017	4.6	240	100	180	160
4/18/2017			91	160	180
4/19/2017		250			
4/25/2017	4.4				
7/13/2017	4.8				
10/10/2017	4.9	240	110	180	260
6/12/2018	4.1				
6/13/2018		220	110	180	330
10/10/2018	2.5	220	110	190	410
3/26/2019	2.9 (J)	190	110	180	420
9/10/2019	2.5	180	110	180	420
3/10/2020	7.8	170	130	170	370
9/16/2020	4.4	160			
9/17/2020			120	160	380
3/24/2021	7.1	180	130	180	280
8/24/2021		160	130		
8/25/2021	6.6			180	420
2/22/2022	4.8				
2/23/2022		180	150	260	390



# Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	78		129	281		
5/6/2016						282
6/20/2016	80	188	156			
6/21/2016				303		516
8/15/2016	58	180	160	310		
8/16/2016						360
9/28/2016	29	100	91	170		190
11/16/2016	140	270	250	340		410
1/16/2017	36					
1/17/2017		170	140	310		
1/19/2017						400
3/2/2017	78	210	170	330		360
4/18/2017	16	160	140	290		360
7/13/2017		150				
10/10/2017	78	210	190	310		480
6/12/2018	62	150	180			
6/13/2018				230		390
10/9/2018	68	150	170			
10/10/2018				300		260
1/29/2019					280	
3/25/2019	54	210	150		250	
3/26/2019				290		370
9/10/2019	14	160	110	260	230	360
3/9/2020	56	190				
3/10/2020			170	300	260	450
9/16/2020	44	150	150	300	320	
9/17/2020						460
3/23/2021	53	220		300	270	
3/24/2021			150			380
8/23/2021	55	200				
8/24/2021			160	300	280	
8/25/2021						470
2/22/2022	38	210	150	300	270	420

# Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2022 1:20 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				272	287
5/6/2016		661	380		
6/21/2016	177	692	392	356	297
8/15/2016				330	230
8/16/2016	160	650	360		
9/28/2016				180	130
9/29/2016	190	640	380		
11/16/2016	240	680	420	330	290
1/17/2017			380	310	240
1/18/2017	180	630			
3/2/2017	170	660	410	340	270
4/18/2017			360	300	310
4/19/2017		600			
4/25/2017	170				
7/13/2017	150				
10/10/2017	160	600	400	340	450
6/12/2018	170				
6/13/2018		570	320	320	600
10/10/2018	48	470	300	270	410
3/26/2019	180	530	370	320	630
9/10/2019	140	470	360	260	660
3/10/2020	170	540	390	370	600
9/16/2020	190	530			
9/17/2020			410	320	740
3/24/2021	190	490	430	330	530
8/24/2021		510	450		
8/25/2021	230			390	720
2/22/2022	190				
2/23/2022		490	450	390	630



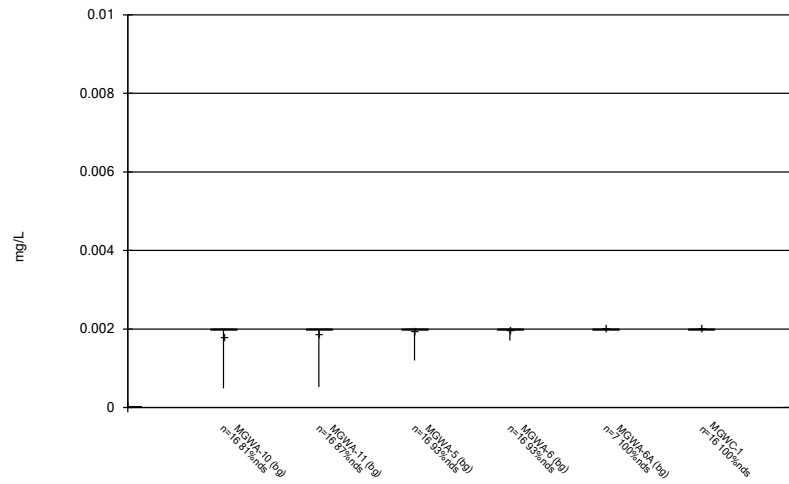
# Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2022 1:20 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.001	<0.001
5/6/2016		<0.001	<0.001		
6/21/2016	<0.001	<0.001	<0.001	<0.001	0.0001 (J)
8/15/2016				<0.001	0.00016 (J)
8/16/2016	<0.001	<0.001	<0.001		
9/28/2016				<0.001	0.00014 (J)
9/29/2016	<0.001	<0.001	<0.001		
11/16/2016	<0.001	<0.001	<0.001	<0.001	9E-05 (J)
1/17/2017			<0.001	<0.001	0.00016 (J)
1/18/2017	<0.001	<0.001			
3/2/2017	<0.001	<0.001	<0.001	<0.001	0.00018 (J)
4/18/2017			<0.001	<0.001	0.00019 (J)
4/19/2017		<0.001			
4/25/2017	<0.001				
7/13/2017	<0.001				
3/29/2018	<0.001			<0.001	
3/30/2018		<0.001	<0.001		0.00027 (J)
6/12/2018	<0.001				
6/13/2018		<0.001	<0.001	<0.001	0.00027 (J)
10/10/2018	<0.001	<0.001	<0.001	<0.001	0.00025 (J)
1/29/2019	<0.001	<0.001	<0.001	<0.001	<0.001
1/28/2020	<0.001			<0.001	
1/29/2020		0.00021 (J)	0.00037 (J)		0.00042 (J)
3/10/2020	0.00015 (J)	<0.001	0.00016 (J)	<0.001	0.00025 (J)
9/16/2020	0.00027 (J)	<0.001			
9/17/2020			<0.001	<0.001	0.00031 (J)
3/24/2021	<0.001	<0.001	<0.001	<0.001	<0.001
8/24/2021		<0.001	<0.001		
8/25/2021	<0.001			<0.001	0.0004 (J)
2/22/2022	<0.001				
2/23/2022		<0.001	<0.001	<0.001	<0.001

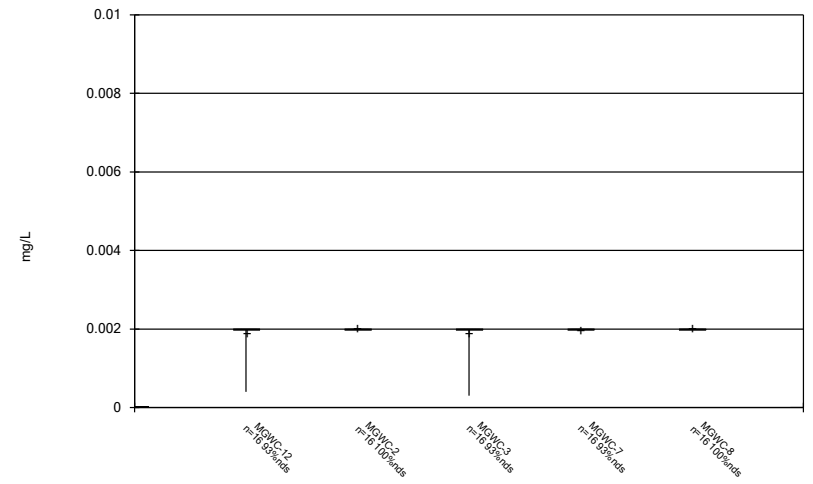
FIGURE B.

Box & Whiskers Plot



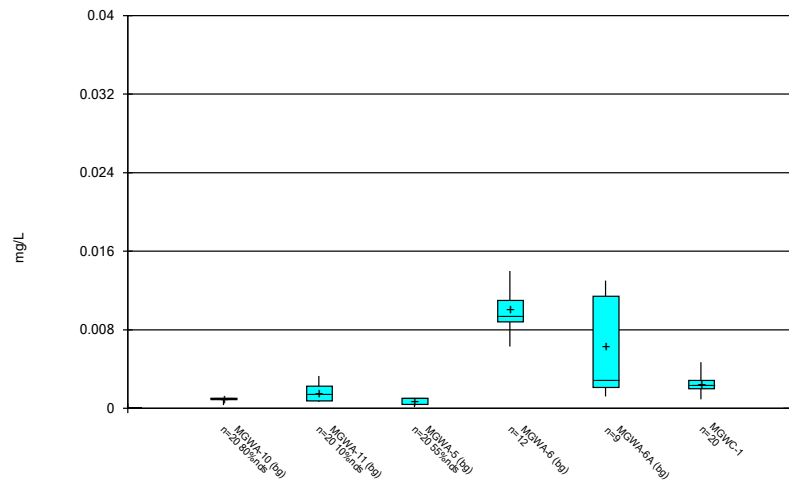
Constituent: Antimony Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



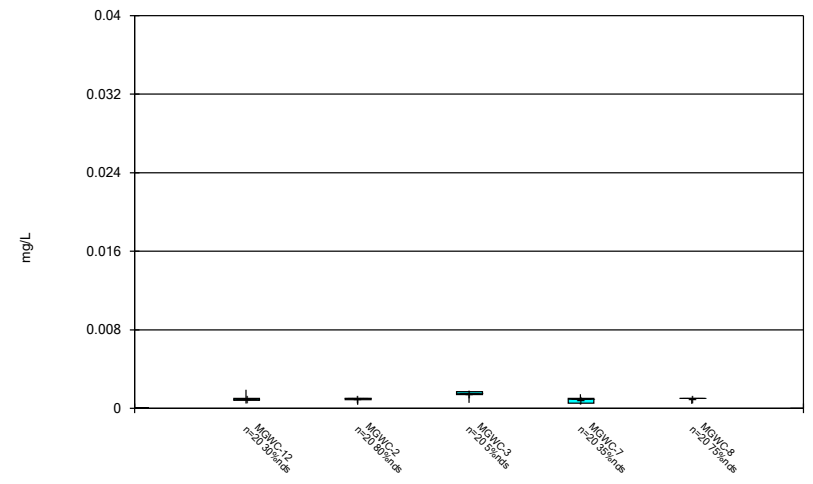
Constituent: Antimony Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



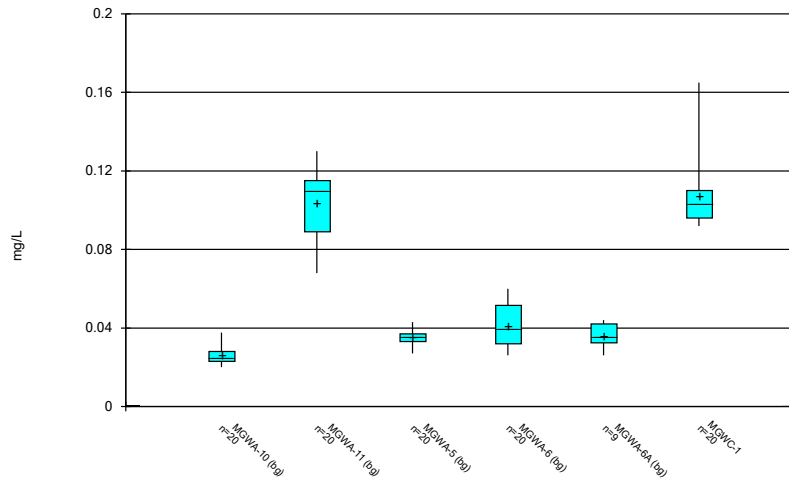
Constituent: Arsenic Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



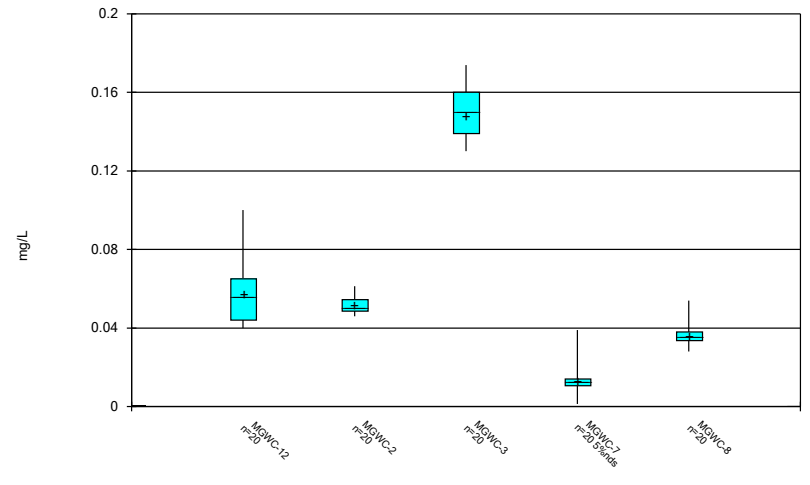
Constituent: Arsenic Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



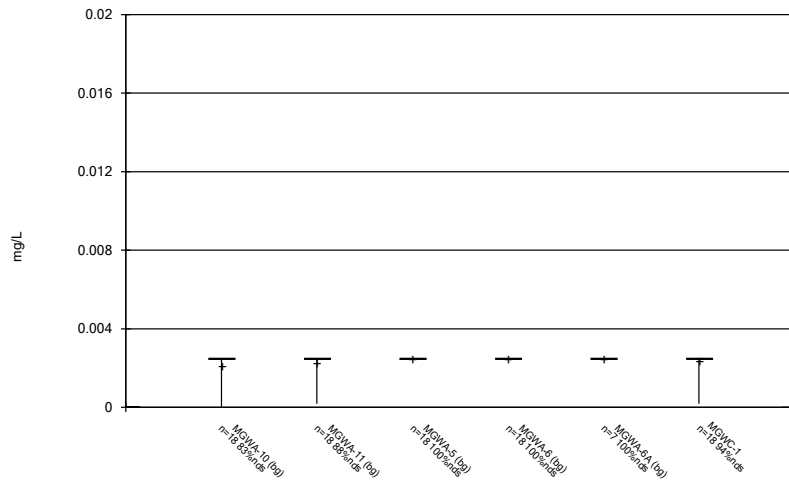
Constituent: Barium Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



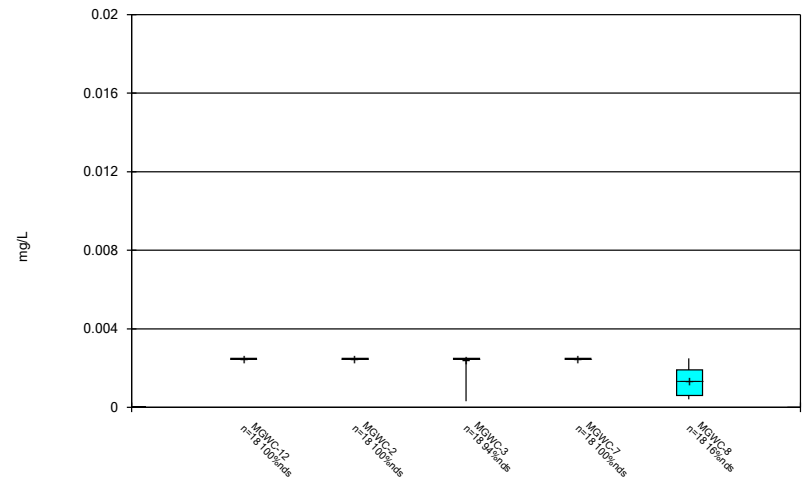
Constituent: Barium Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



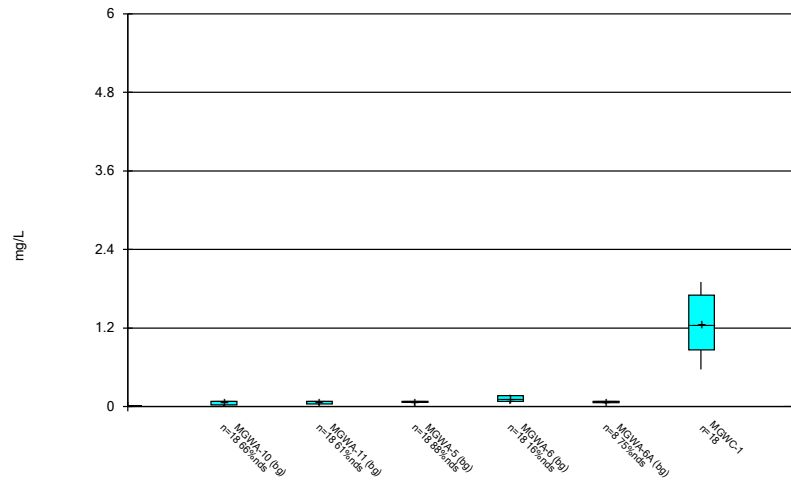
Constituent: Beryllium Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



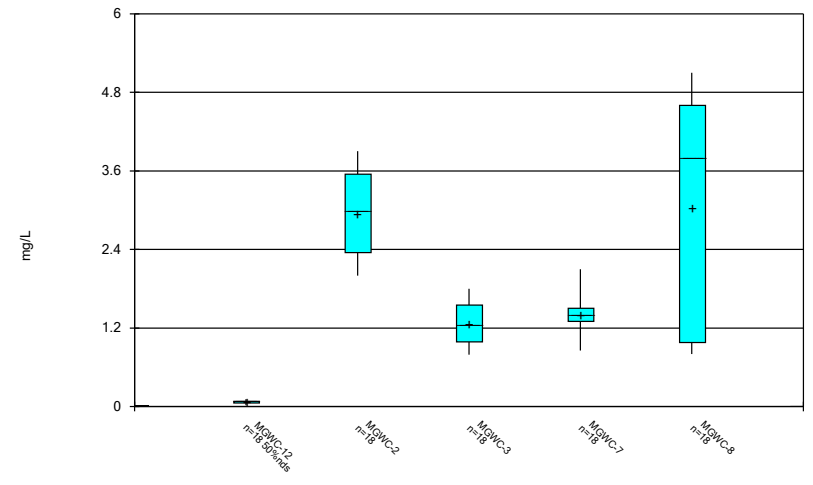
Constituent: Beryllium Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



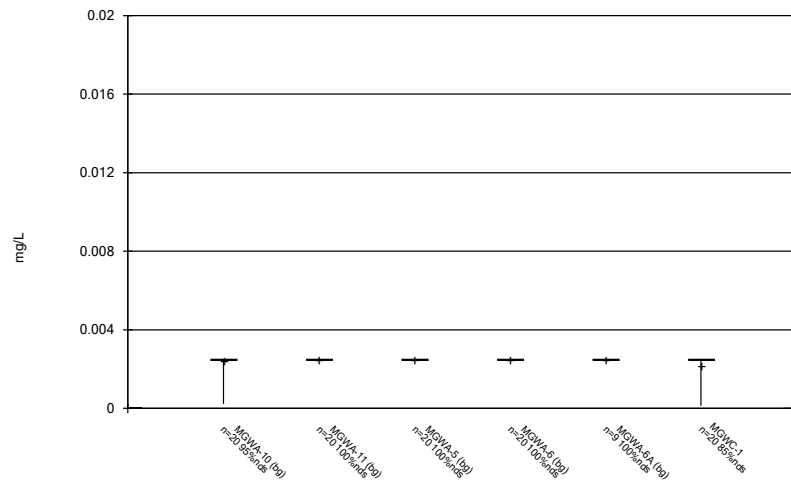
Constituent: Boron Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



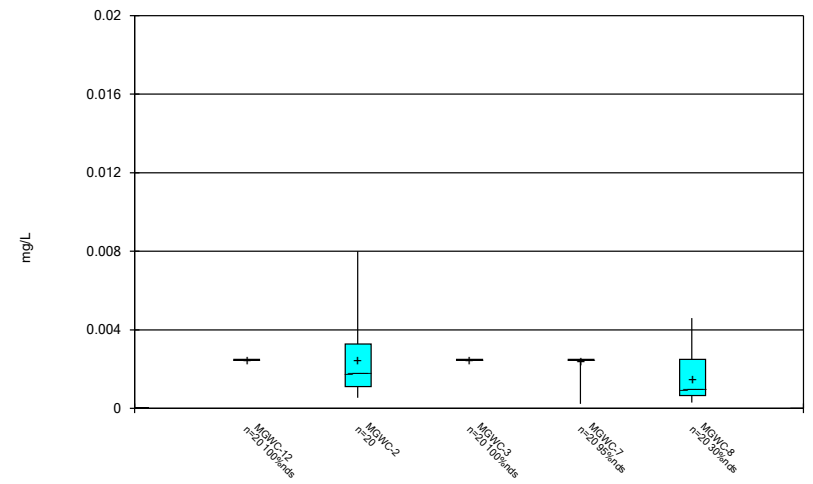
Constituent: Boron Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

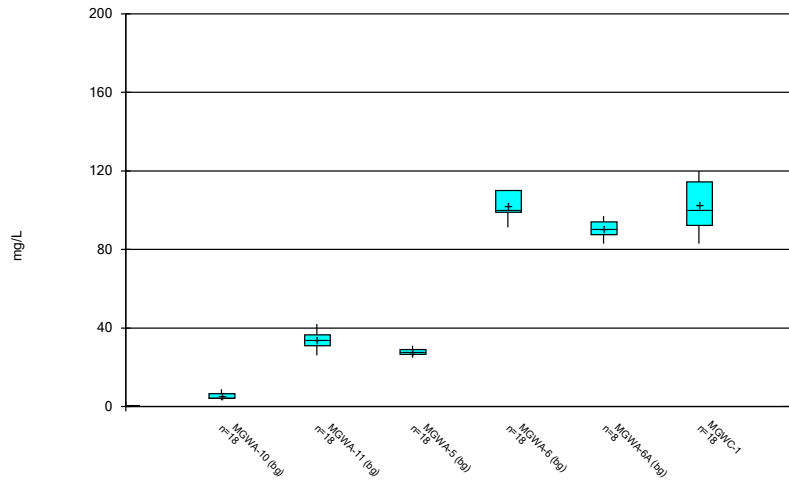
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

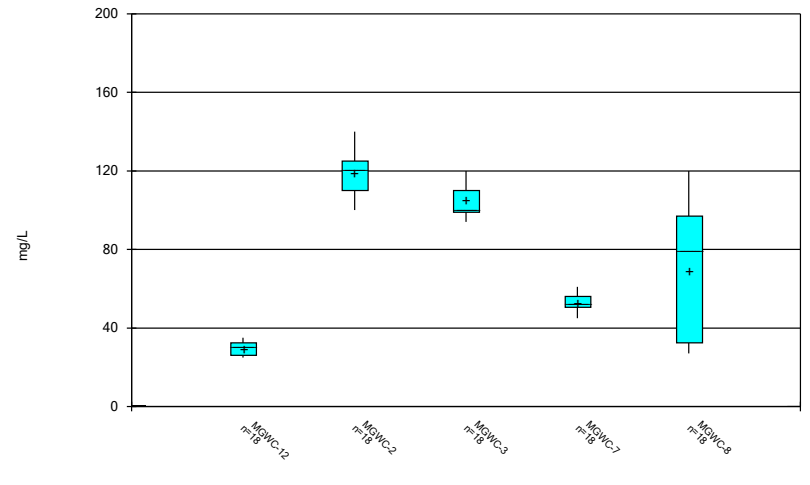


### Box & Whiskers Plot



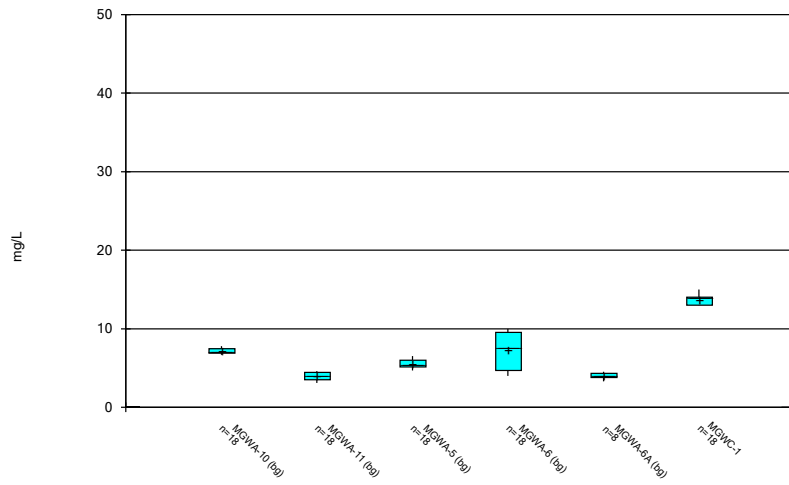
Constituent: Calcium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



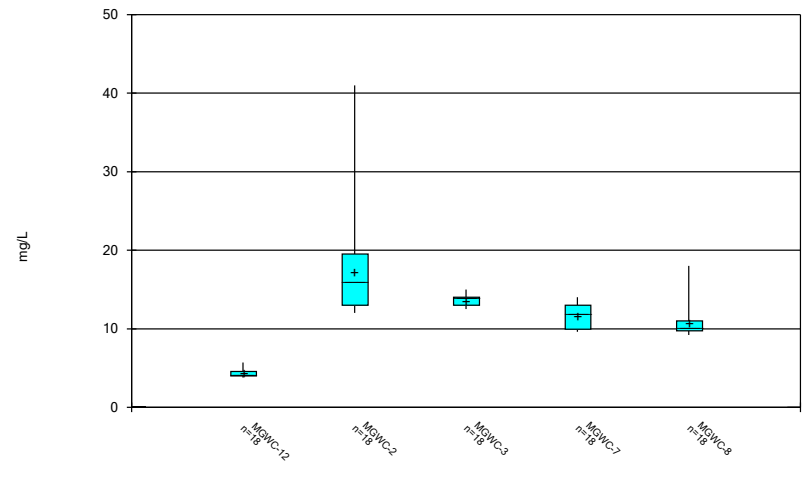
Constituent: Calcium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



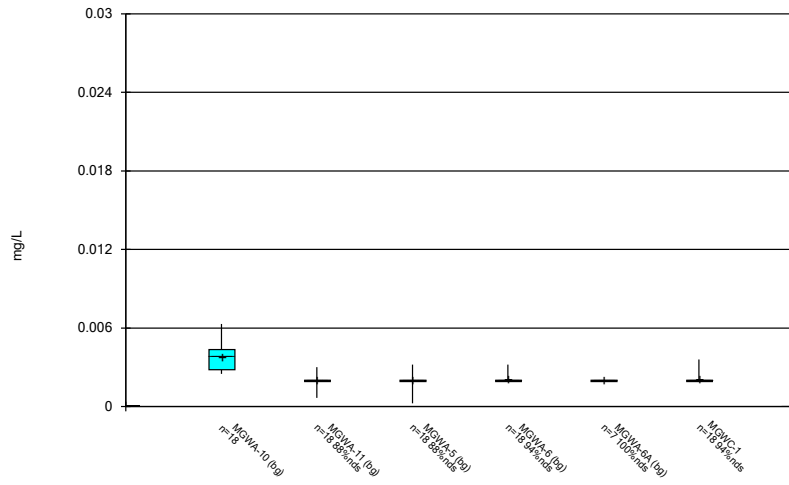
Constituent: Chloride Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



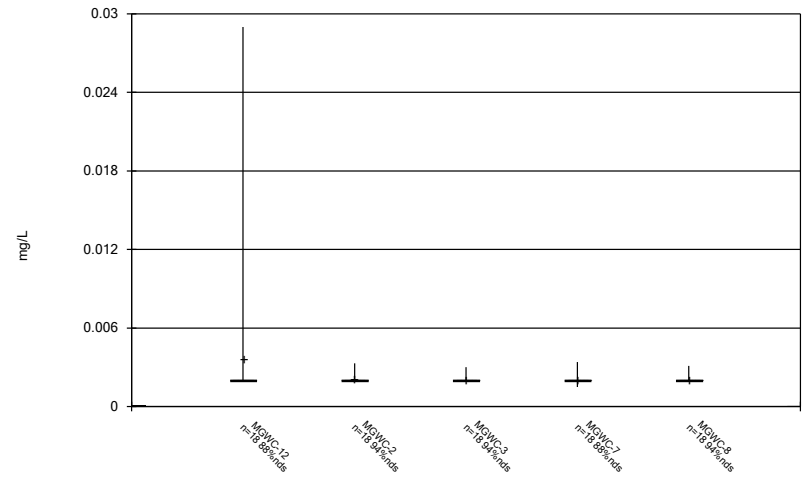
Constituent: Chloride Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



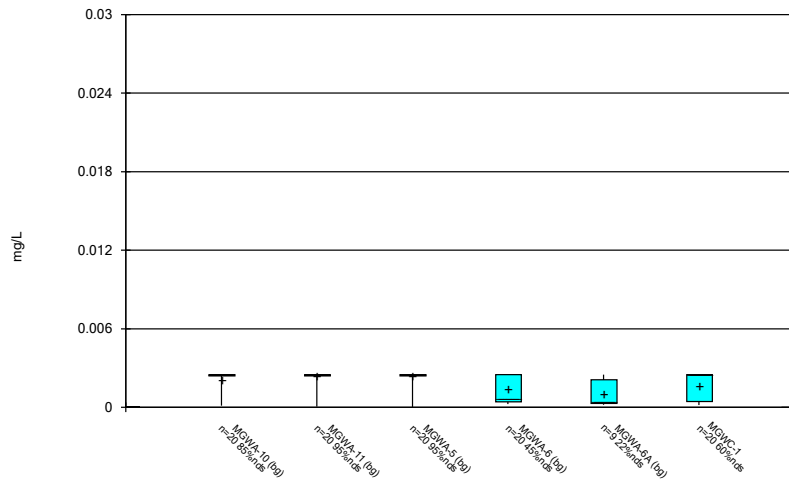
Constituent: Chromium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



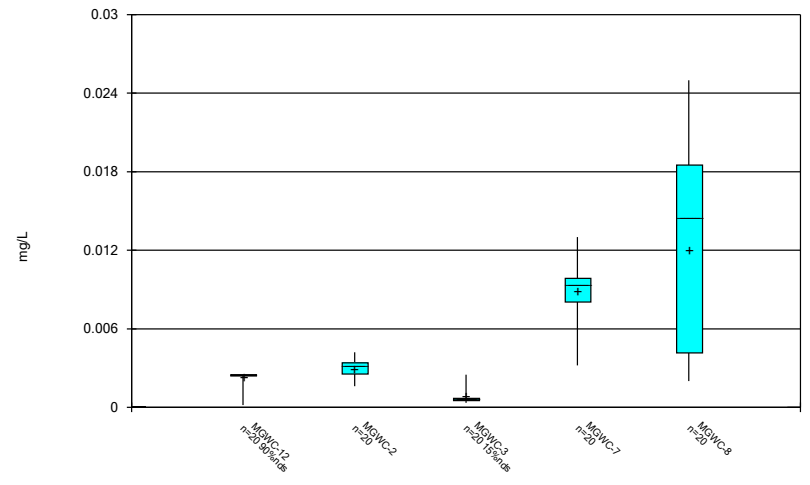
Constituent: Chromium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



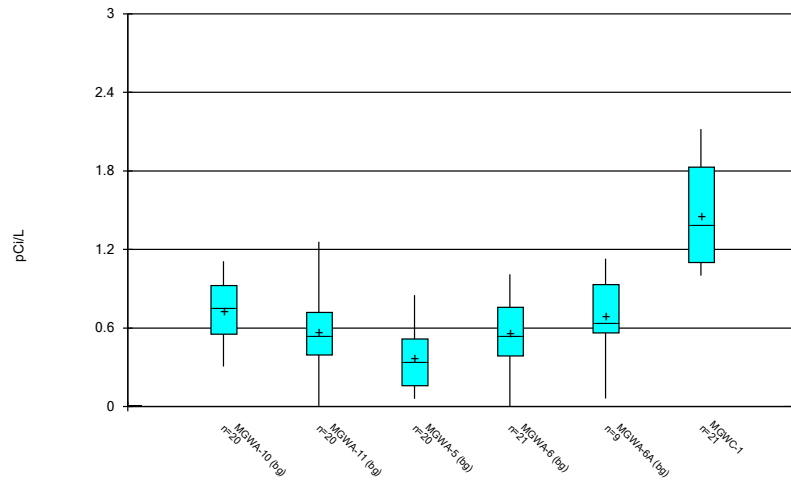
Constituent: Cobalt Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



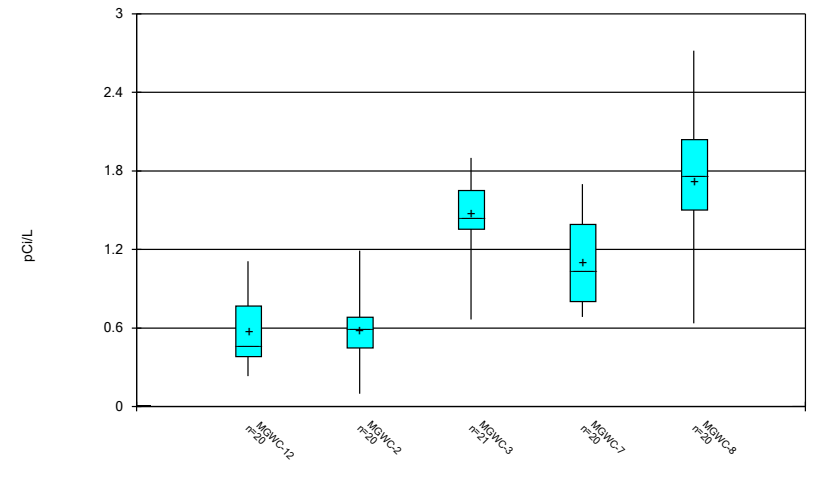
Constituent: Cobalt Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



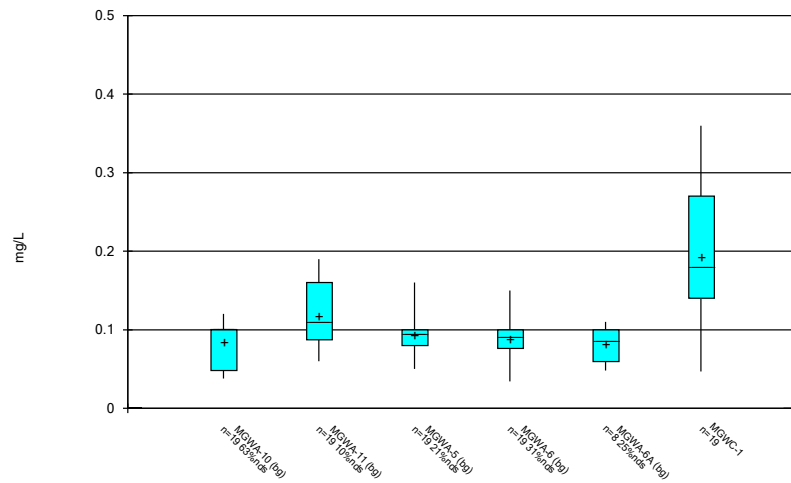
Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



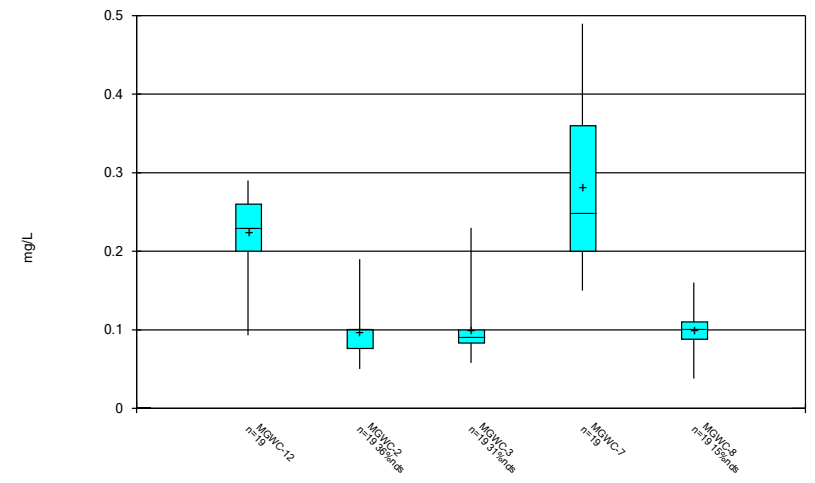
Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



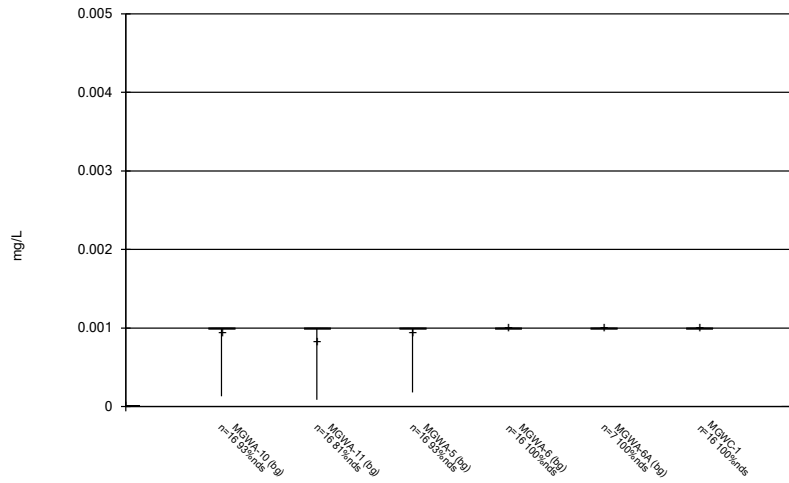
Constituent: Fluoride Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



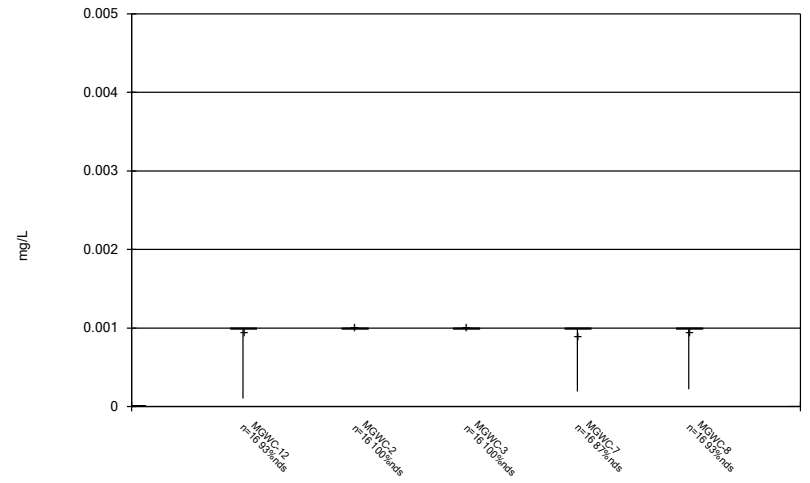
Constituent: Fluoride Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



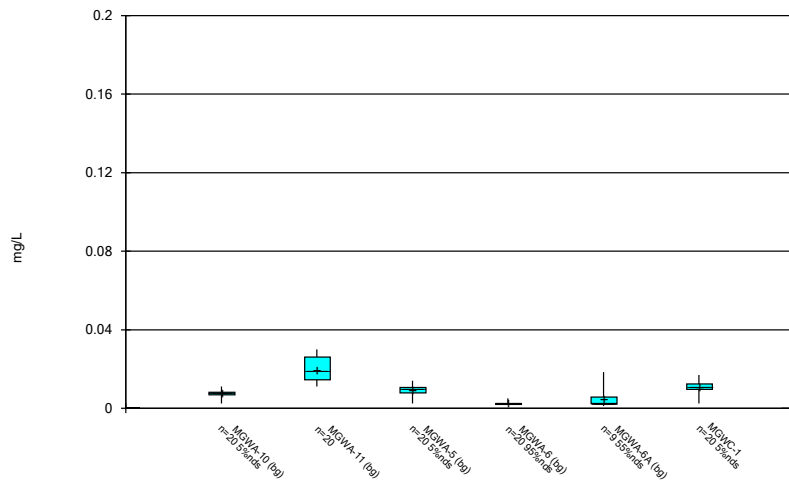
Constituent: Lead Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



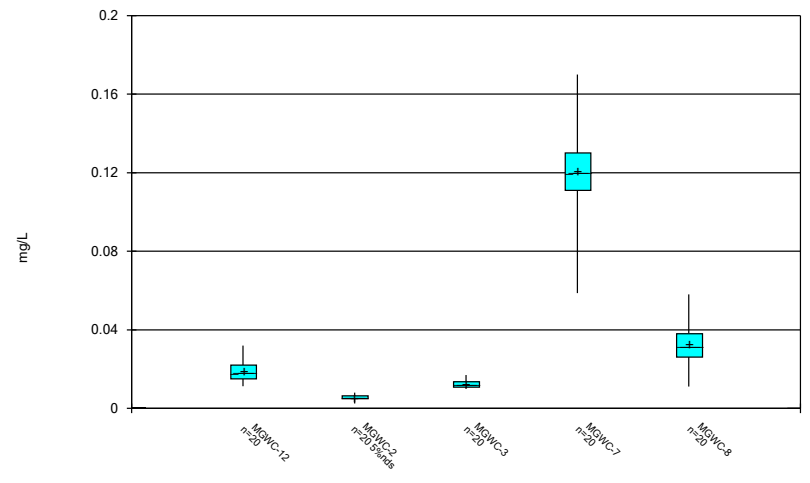
Constituent: Lead Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



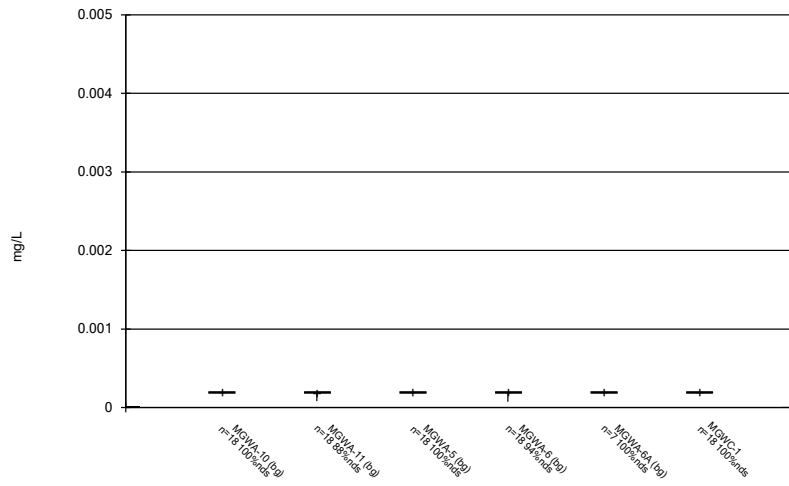
Constituent: Lithium Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



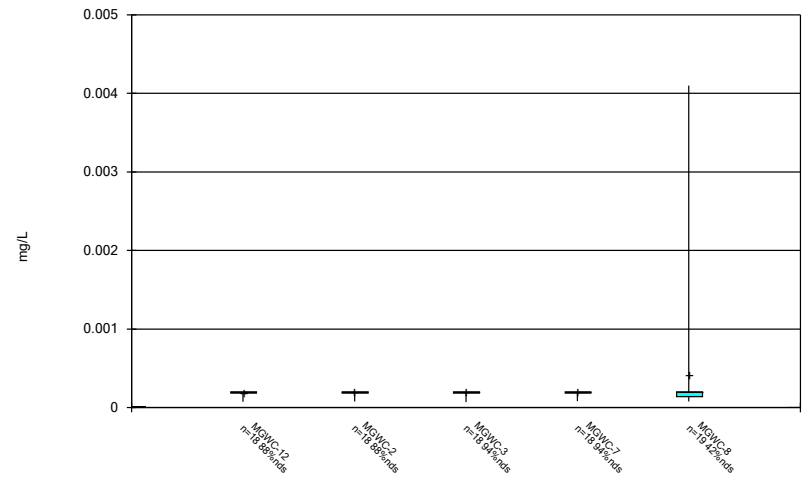
Constituent: Lithium Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



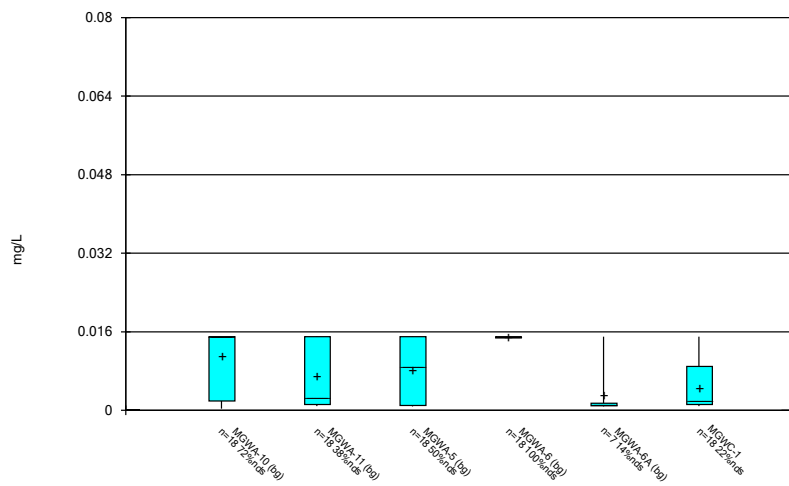
Constituent: Mercury Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



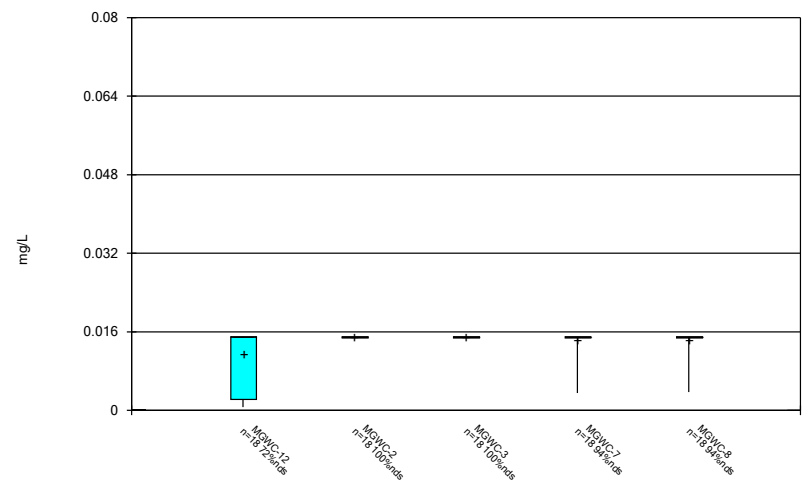
Constituent: Mercury Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



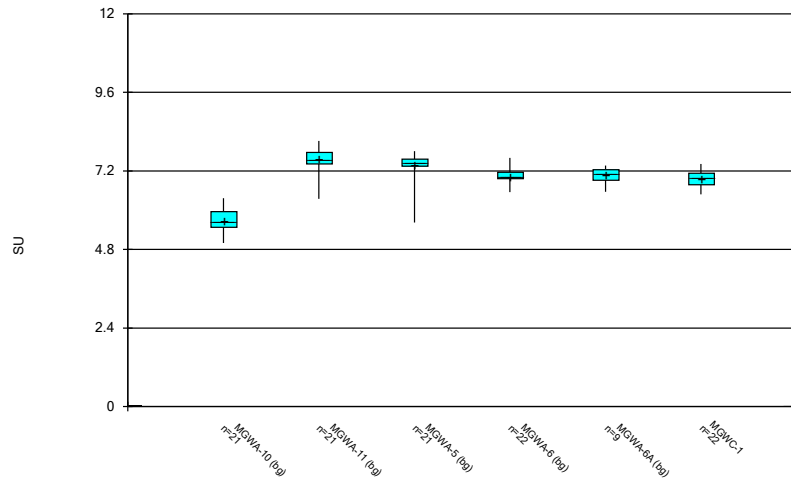
Constituent: Molybdenum Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



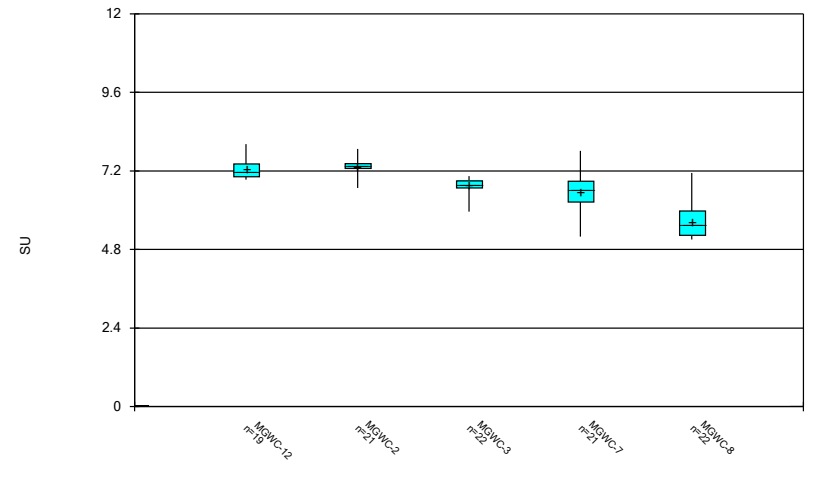
Constituent: Molybdenum Analysis Run 5/23/2022 1:21 PM  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



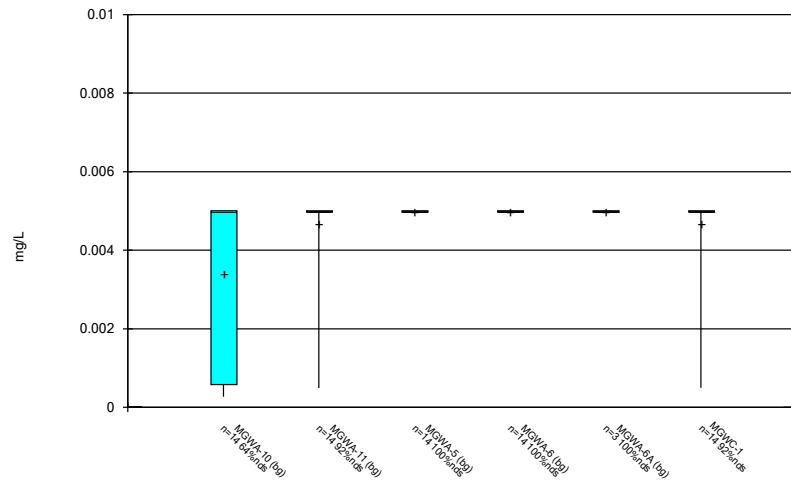
Constituent: pH Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



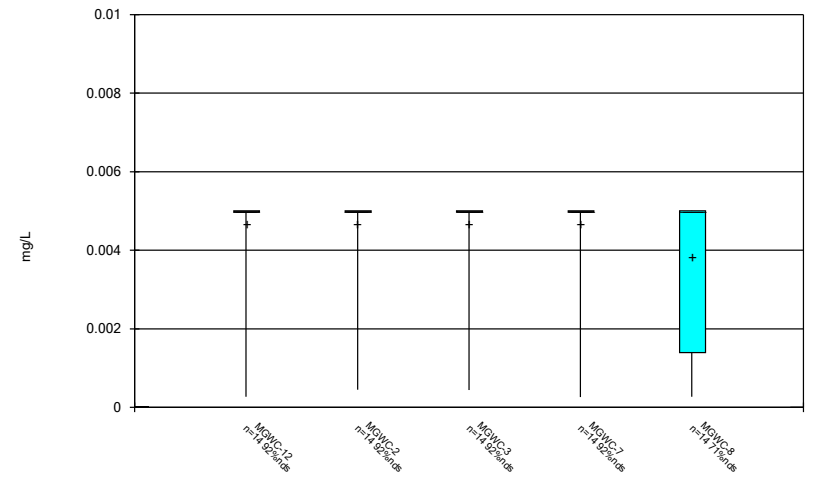
Constituent: pH Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



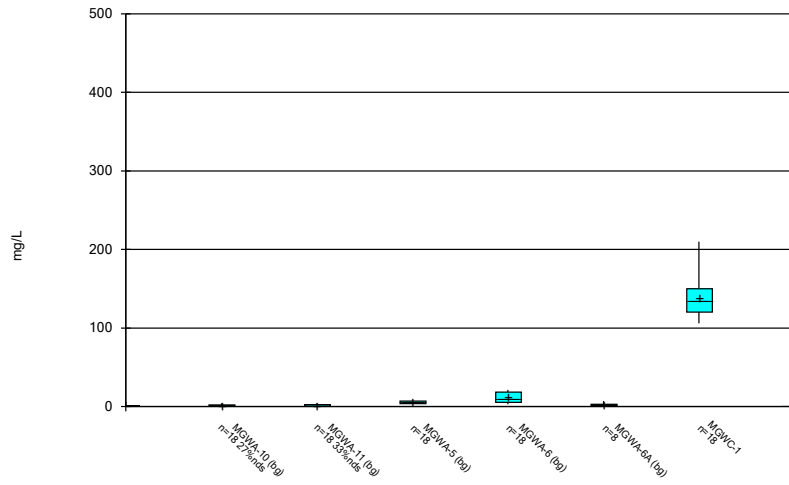
Constituent: Selenium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



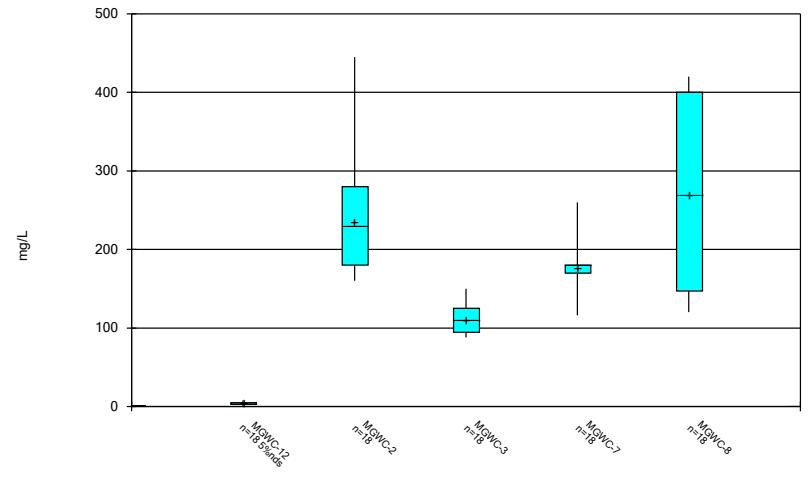
Constituent: Selenium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



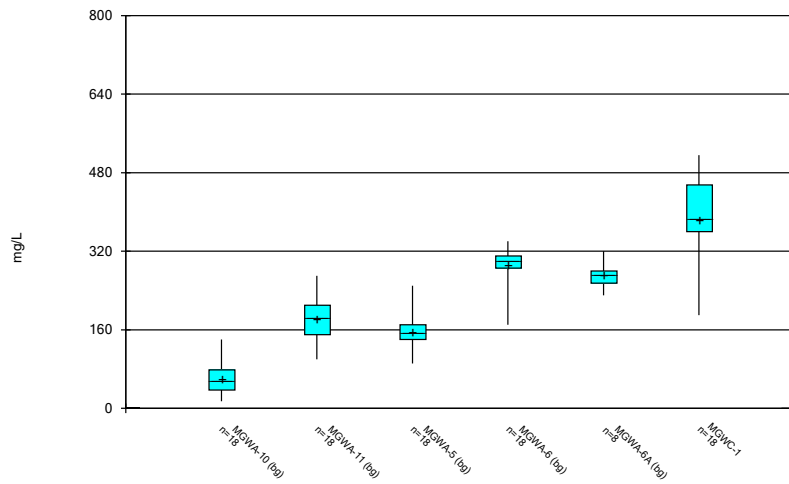
Constituent: Sulfate Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



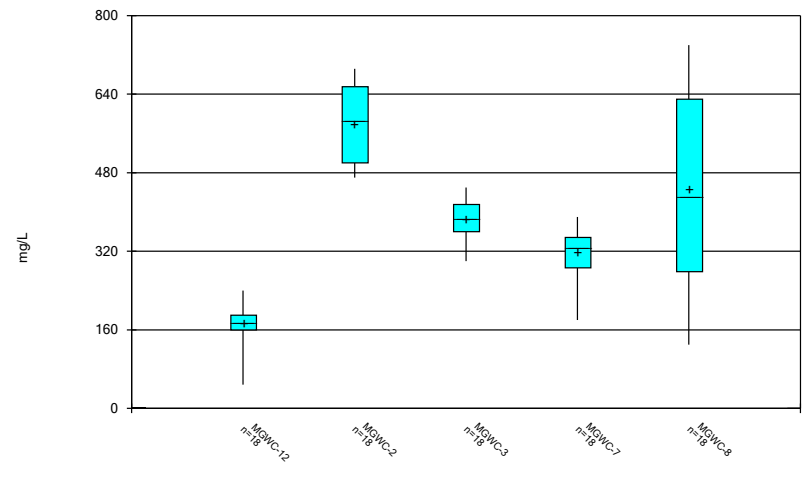
Constituent: Sulfate Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



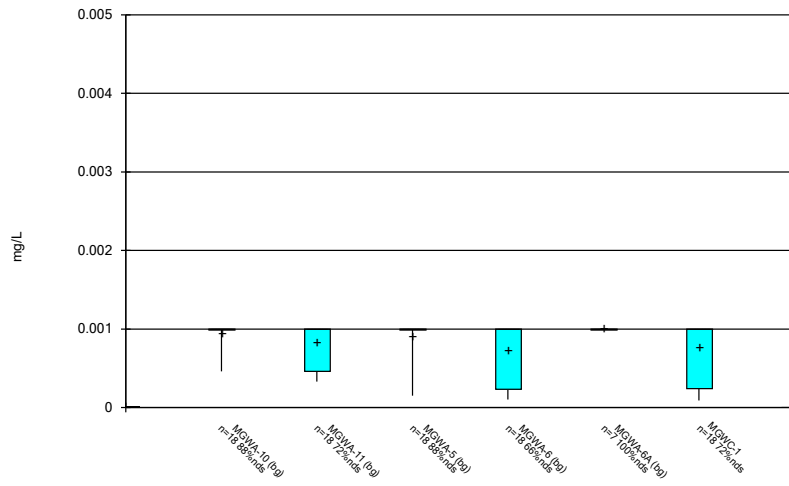
Constituent: TDS Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



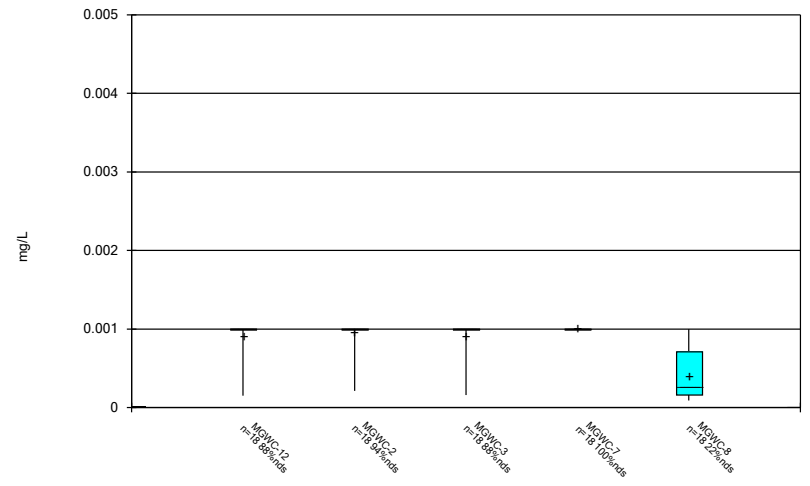
Constituent: TDS Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/23/2022 1:21 PM  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



FIGURE C.

# Outlier Summary

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 4:31 PM

---

MGWC-12 pH (SU)

9/10/2019	10.96 (o)
9/16/2020	11.03 (o)

FIGURE D.

# Interwell Prediction Limits - Significant Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 5/23/2022, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	2/22/2022	1.7	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	2/23/2022	2	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	2/23/2022	0.83	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	2/23/2022	2.1	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	2/23/2022	4.1	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	2/23/2022	120	Yes	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Chloride (mg/L)	MGWC-1	9.409	n/a	2/22/2022	13	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.409	n/a	2/23/2022	13	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.409	n/a	2/23/2022	14	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.409	n/a	2/23/2022	9.8	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.409	n/a	2/23/2022	11	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	2/23/2022	0.22	Yes	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	20.19	n/a	2/22/2022	150	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	20.19	n/a	2/23/2022	180	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	20.19	n/a	2/23/2022	150	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	20.19	n/a	2/23/2022	260	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	20.19	n/a	2/23/2022	390	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	349.9	n/a	2/22/2022	420	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	349.9	n/a	2/23/2022	490	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	349.9	n/a	2/23/2022	450	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	349.9	n/a	2/23/2022	390	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	349.9	n/a	2/23/2022	630	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2

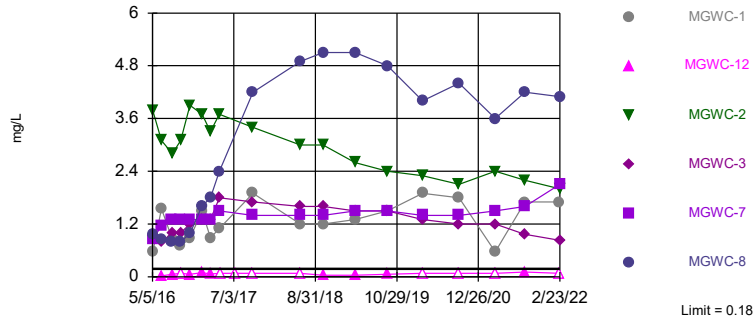
# Interwell Prediction Limits - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 5/23/2022, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron (mg/L)</b>	<b>MGWC-1</b>	<b>0.18</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>1.7</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-12	0.18	n/a	2/22/2022	0.08ND	No	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>0.18</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>2</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-3	0.18	n/a	2/23/2022	0.83	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.18</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>2.1</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-8	0.18	n/a	2/23/2022	4.1	Yes	80	n/a	n/a	60	n/a	n/a	0.0002988	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MGWC-1	110	n/a	2/22/2022	100	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	2/22/2022	35	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	2/23/2022	100	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
<b>Calcium (mg/L)</b>	<b>MGWC-3</b>	<b>110</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>120</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002988</b>	<b>NP Inter (normality) 1 of 2</b>
Calcium (mg/L)	MGWC-7	110	n/a	2/23/2022	61	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	2/23/2022	97	No	80	n/a	n/a	0	n/a	n/a	0.0002988	NP Inter (normality) 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-1</b>	<b>9.409</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>13</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MGWC-12	9.409	n/a	2/22/2022	4	No	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>9.409</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>13</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MGWC-3	9.409	n/a	2/23/2022	14	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>9.409</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>9.8</b>	<b>Yes</b>	<b>80</b>	<b>2.378</b>	<b>0.3711</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MGWC-8	9.409	n/a	2/23/2022	11	Yes	80	2.378	0.3711	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-1	0.19	n/a	2/22/2022	0.047J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	2/22/2022	0.093J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-2	0.19	n/a	2/23/2022	0.075J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	2/23/2022	0.086J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>0.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>0.22</b>	<b>Yes</b>	<b>84</b>	<b>n/a</b>	<b>n/a</b>	<b>30.95</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002742</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	MGWC-8	0.19	n/a	2/23/2022	0.05J	No	84	n/a	n/a	30.95	n/a	n/a	0.0002742	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	7.926	4.577	2/22/2022	7.32	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-12	7.926	4.577	2/22/2022	7.41	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-2	7.926	4.577	2/23/2022	7.44	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-3	7.926	4.577	2/23/2022	6.98	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-7	7.926	4.577	2/23/2022	6.91	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
pH (SU)	MGWC-8	7.926	4.577	2/23/2022	6.22	No	94	128544	64655	0	None	x^6	0.0006268	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-1</b>	<b>20.19</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>150</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-12	20.19	n/a	2/22/2022	4.8	No	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>20.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>180</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-3	20.19	n/a	2/23/2022	150	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-7</b>	<b>20.19</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>260</b>	<b>Yes</b>	<b>80</b>	<b>0.9799</b>	<b>1.091</b>	<b>13.75</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-8	20.19	n/a	2/23/2022	390	Yes	80	0.9799	1.091	13.75	None	ln(x)	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-1</b>	<b>349.9</b>	<b>n/a</b>	<b>2/22/2022</b>	<b>420</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
TDS (mg/L)	MGWC-12	349.9	n/a	2/22/2022	190	No	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>349.9</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>490</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
TDS (mg/L)	MGWC-3	349.9	n/a	2/23/2022	450	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-7</b>	<b>349.9</b>	<b>n/a</b>	<b>2/23/2022</b>	<b>390</b>	<b>Yes</b>	<b>80</b>	<b>181.4</b>	<b>90.75</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
TDS (mg/L)	MGWC-8	349.9	n/a	2/23/2022	630	Yes	80	181.4	90.75	0	None	No	0.001254	Param Inter 1 of 2

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Non-parametric

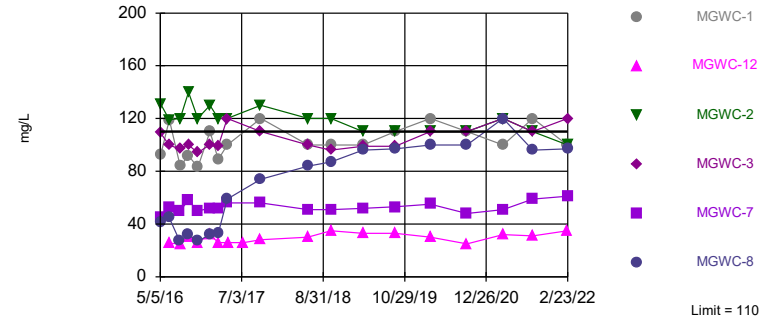


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 80 background values. 60% NDs. Annual per-constituent alpha = 0.00358. Individual comparison alpha = 0.0002988 (1 of 2). Comparing 6 points to limit.

Constituent: Boron Analysis Run 5/23/2022 4:33 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-3

Prediction Limit  
Interwell Non-parametric

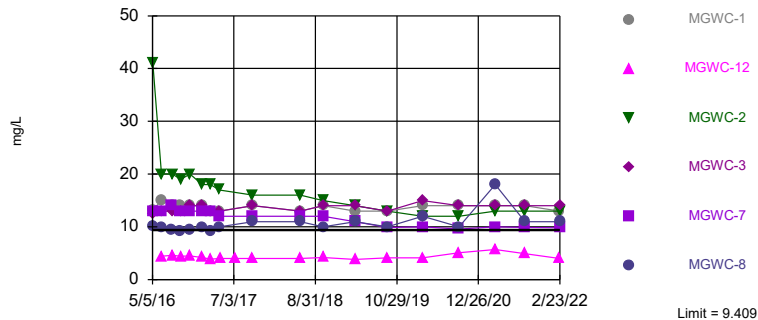


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 80 background values. Annual per-constituent alpha = 0.00358. Individual comparison alpha = 0.0002988 (1 of 2). Comparing 6 points to limit.

Constituent: Calcium Analysis Run 5/23/2022 4:33 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Parametric

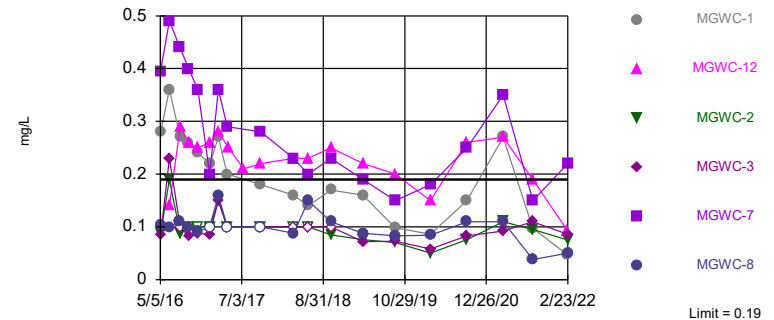


Background Data Summary (based on square root transformation): Mean=2.378, Std. Dev.=0.3711, n=80. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9652, critical = 0.957. Kappa = 1.857 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Chloride Analysis Run 5/23/2022 4:33 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-7

Prediction Limit  
Interwell Non-parametric

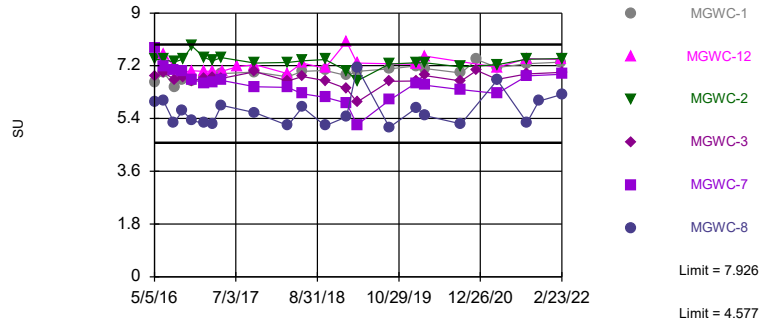


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 84 background values. 30.95% NDs. Annual per-constituent alpha = 0.003286. Individual comparison alpha = 0.0002742 (1 of 2). Comparing 6 points to limit.

Constituent: Fluoride Analysis Run 5/23/2022 4:33 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Within Limits

Prediction Limit  
Interwell Parametric



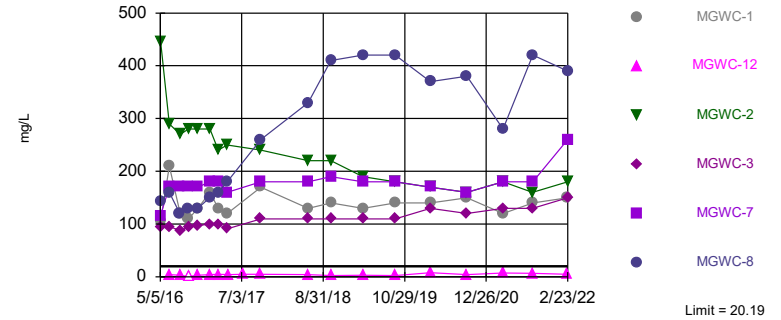
Background Data Summary (based on  $x^6$  transformation): Mean=128544, Std. Dev.=64655, n=94. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9664, critical = 0.964. Kappa = 1.846 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0006268. Comparing 6 points to limit.

Constituent: pH Analysis Run 5/23/2022 4:33 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Parametric

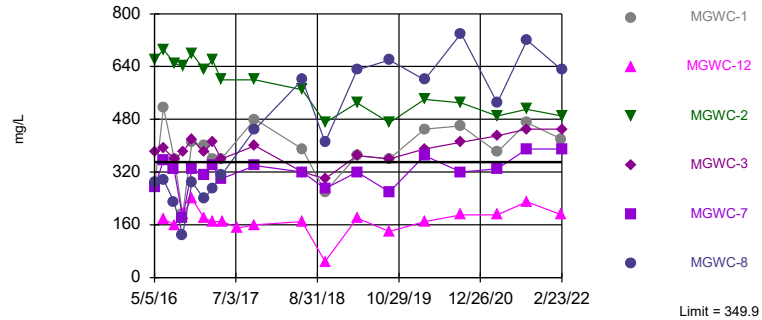


Background Data Summary (based on natural log transformation): Mean=0.9799, Std. Dev.=1.091, n=80, 13.75% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9693, critical = 0.957. Kappa = 1.857 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Sulfate Analysis Run 5/23/2022 4:33 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=181.4, Std. Dev.=90.75, n=80. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9644, critical = 0.957. Kappa = 1.857 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: TDS Analysis Run 5/23/2022 4:33 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	<0.08	0.157	0.976	0.855	<0.08				
5/6/2016						0.926	0.567	3.78	
6/20/2016	0.011 (J)				0.013 (J)				0.017 (J)
6/21/2016		0.124	0.862	1.15		0.792	1.55	3.1	
8/15/2016	0.022 (J)	0.18	0.8	1.3	0.023 (J)				0.032 (J)
8/16/2016						1	0.85	2.8	
9/28/2016	0.023 (J)	0.17	0.8	1.3	<0.08		0.7		0.021 (J)
9/29/2016						1		3.1	
11/16/2016	<0.08	0.17	0.98	1.3	<0.08	1.2	0.88	3.9	<0.08
1/16/2017	0.021 (J)								
1/17/2017		0.17	1.6	1.3	<0.08	1.3			<0.08
1/18/2017								3.7	
1/19/2017							1.5		
3/2/2017	<0.08	0.14	1.8	1.3	<0.08	1.3	0.89	3.3	<0.08
4/18/2017	<0.08	0.14	2.4	1.5	<0.08	1.8	1.1		<0.08
4/19/2017								3.7	
4/25/2017									
7/13/2017									<0.08
10/10/2017	0.021 (J)	0.12	4.2	1.4	<0.08	1.7	1.9	3.4	0.025 (J)
6/12/2018	<0.08				<0.08				<0.08
6/13/2018		0.11	4.9	1.4		1.6	1.2	3	
10/9/2018	<0.08				<0.08				<0.08
10/10/2018		0.096 (J)	5.1	1.4		1.6	1.2	3	
1/29/2019									
3/25/2019	<0.08				<0.08				<0.08
3/26/2019		0.079 (J)	5.1	1.5		1.5	1.3	2.6	
9/10/2019	<0.08	0.097	4.8	1.5	<0.08	1.5	1.5	2.4	<0.08
3/9/2020	0.045 (J)								<0.08
3/10/2020		0.051 (J)	4	1.4	<0.08	1.3	1.9	2.3	
9/16/2020	<0.08	0.041 (J)			<0.08			2.1	0.045 (J)
9/17/2020			4.4	1.4		1.2	1.8		
3/23/2021	<0.08	<0.08							0.047 (J)
3/24/2021			3.6	1.5	<0.08	1.2	0.57	2.4	
8/23/2021	<0.08								0.043 (J)
8/24/2021		<0.08			<0.08	0.97		2.2	
8/25/2021			4.2	1.6			1.7		
2/22/2022	<0.08	<0.08			<0.08		1.7		<0.08
2/23/2022			4.1	2.1		0.83		2	



# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	0.0201 (J)	
8/15/2016		
8/16/2016	0.055	
9/28/2016		
9/29/2016	<0.08	
11/16/2016	0.055	
1/16/2017		
1/17/2017		
1/18/2017	0.097	
1/19/2017		
3/2/2017	0.064	
4/18/2017		
4/19/2017		
4/25/2017	<0.08	
7/13/2017	<0.08	
10/10/2017	<0.08	
6/12/2018	<0.08	
6/13/2018		
10/9/2018		
10/10/2018	0.034 (J)	
1/29/2019		<0.08
3/25/2019		<0.08
3/26/2019	0.032 (J)	
9/10/2019	0.06 (J)	0.04 (J)
3/9/2020		
3/10/2020	<0.08	<0.08
9/16/2020	<0.08	0.04 (J)
9/17/2020		
3/23/2021		<0.08
3/24/2021	<0.08	
8/23/2021		
8/24/2021		<0.08
8/25/2021	0.11	
2/22/2022	<0.08	<0.08
2/23/2022		

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	8.83	105	41.2	45	27				
5/6/2016						109	92.5	131	
6/20/2016	8.1				29.4				35.5
6/21/2016		91.2	44.7	52.8		99.7	119	119	
8/15/2016	6.1	94	27	50	26				34
8/16/2016						97	84	120	
9/28/2016	7.2	110	32	58	31		92		38
9/29/2016						100		140	
11/16/2016	5.2	98	27	50	26	94	83	120	33
1/16/2017	3.8								
1/17/2017		100	32	52	29	100			34
1/18/2017								130	
1/19/2017							110		
3/2/2017	5.4	100	33	52	28	99	89	120	35
4/18/2017	5	110	59	56	27	120	100		33
4/19/2017								120	
4/25/2017									
7/13/2017									30
10/10/2017	4.8	110	74	56	31	110	120	130	39
6/12/2018	4.8				25				26
6/13/2018		100	84	51		100	100	120	
10/9/2018	4.5				29				29
10/10/2018		100	87	51		96	100	120	
1/29/2019									
3/25/2019	4.6				27				37
3/26/2019		100	96	52		99	100	110	
9/10/2019	4.9	110	97	53	27	99	110	110	36
3/9/2020	4								32
3/10/2020		100	100	55	29	110	120	110	
9/16/2020	6.8	100			28			110	30
9/17/2020			100	48		110	110		
3/23/2021	4	110							42
3/24/2021			120	51	28	120	100	120	
8/23/2021	5.8								34
8/24/2021		100			27	110		110	
8/25/2021			96	59			120		
2/22/2022	3.3	97			25		100		36
2/23/2022			97	61		120		100	

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	25.5	
8/15/2016		
8/16/2016	25	
9/28/2016		
9/29/2016	30	
11/16/2016	26	
1/16/2017		
1/17/2017		
1/18/2017	32	
1/19/2017		
3/2/2017	26	
4/18/2017		
4/19/2017		
4/25/2017	26	
7/13/2017	26	
10/10/2017	28	
6/12/2018	30	
6/13/2018		
10/9/2018		
10/10/2018	35	
1/29/2019		95.1
3/25/2019		89
3/26/2019	33	
9/10/2019	33	86
3/9/2020		
3/10/2020	30	90
9/16/2020	25	93
9/17/2020		
3/23/2021		97
3/24/2021	32	
8/23/2021		
8/24/2021		83
8/25/2021	31	
2/22/2022	35	90
2/23/2022		

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	7.35	9.67	10.1	13	6.51				
5/6/2016						12.5	13.2	41	
6/20/2016	7				5.9				4.3
6/21/2016		9.2	10	13		13	15	20	
8/15/2016	7.5	10	9.5	14	6.4				4.1
8/16/2016						13	14	20	
9/28/2016	7	10	9.2	13	6.1		14		3.9
9/29/2016						13		19	
11/16/2016	7.5	10	9.5	13	6.1	14	14	20	4.1
1/16/2017	7.7								
1/17/2017		9.4	10	13	5.7	14			3.9
1/18/2017								18	
1/19/2017							14		
3/2/2017	6.9	8.6	9.3	13	5.3	13	13	18	3.5
4/18/2017	6.8	8.9	10	12	5.3	13	13		3.7
4/19/2017								17	
4/25/2017									
7/13/2017									4.2
10/10/2017	6.9	8.3	11	12	5.3	14	14	16	3.4
6/12/2018	6.7				5.1				4.6
6/13/2018		7	11	12		13	13	16	
10/9/2018	7.1				5.6				4.5
10/10/2018		6.9	10	12		14	14	15	
1/29/2019									
3/25/2019	6.8				4.7				3.4
3/26/2019		5.8	11	11		14	13	14	
9/10/2019	7	6	10	9.9	5.1	13	13	13	3.5
3/9/2020	7.4								4.5
3/10/2020		5.1	12	10	5.4	15	14	12	
9/16/2020	7	4.3			5.2			12	4.6
9/17/2020			10	9.6		14	14		
3/23/2021	7.8	4							3.8
3/24/2021			18	10	5.5	14	14	13	
8/23/2021	7.3								4.4
8/24/2021		4			5.5	14		13	
8/25/2021			11	9.9			14		
2/22/2022	7.1	4			5.1		13		3.1
2/23/2022			11	9.8		14		13	

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	4.4	
8/15/2016		
8/16/2016	4.6	
9/28/2016		
9/29/2016	4.4	
11/16/2016	4.5	
1/16/2017		
1/17/2017		
1/18/2017	4.2	
1/19/2017		
3/2/2017	3.9	
4/18/2017		
4/19/2017		
4/25/2017	4	
7/13/2017	4	
10/10/2017	4	
6/12/2018	4	
6/13/2018		
10/9/2018		
10/10/2018	4.2	
1/29/2019		4.51
3/25/2019		4.4
3/26/2019	3.8	
9/10/2019	4.1	4.2
3/9/2020		
3/10/2020	4.1	4
9/16/2020	5.1	3.7
9/17/2020		
3/23/2021		4.1
3/24/2021	5.7	
8/23/2021		
8/24/2021		3.9
8/25/2021	4.9	
2/22/2022	4	3.3
2/23/2022		

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-7	MGWA-5 (bg)	MGWA-6 (bg)	MGWC-8	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	0.046 (J)	0.394	0.132 (J)	0.091 (J)	0.103 (J)				
5/6/2016						0.088 (J)	0.28 (J)	0.086 (J)	
6/20/2016	<0.1		0.05 (J)						0.06 (J)
6/21/2016		0.49		0.08 (J)	0.1 (J)	0.19 (J)	0.36	0.23 (J)	
8/15/2016	<0.1	0.44	0.1 (J)	<0.1	0.11 (J)				0.1 (J)
8/16/2016						0.087 (J)	0.27	<0.1	
9/28/2016	<0.1	0.4	0.11 (J)	0.084 (J)	0.1 (J)		0.26		0.097 (J)
9/29/2016						<0.1		0.082 (J)	
11/16/2016	<0.1	0.36	0.093 (J)	0.084 (J)	0.091 (J)	<0.1	0.24	0.087 (J)	0.12 (J)
1/16/2017	<0.1								
1/17/2017		0.2	0.095 (J)	0.099 (J)	<0.1			0.086 (J)	0.11 (J)
1/18/2017						<0.1			
1/19/2017							0.22		
3/2/2017	0.12 (J)	0.36	0.16 (J)	0.15 (J)	0.16 (J)	0.15 (J)	0.27	0.15 (J)	0.18 (J)
4/18/2017	<0.1	0.29	<0.1	<0.1	<0.1		0.2	<0.1	0.11 (J)
4/19/2017						<0.1			
4/25/2017									
7/13/2017									0.12 (J)
10/10/2017	<0.1	0.28	<0.1	<0.1	<0.1	<0.1	0.18 (J)	<0.1	0.086 (J)
3/29/2018	<0.1	0.23	0.084 (J)	<0.1			0.16 (J)		<0.1
3/30/2018					0.088 (J)	<0.1		<0.1	
6/12/2018	<0.1		<0.1						0.16 (J)
6/13/2018		0.2		<0.1	0.15 (J)	<0.1	0.14 (J)	<0.1	
10/9/2018	<0.1		0.086 (J)						0.16 (J)
10/10/2018		0.23		<0.1	0.11 (J)	0.085 (J)	0.17 (J)	<0.1	
1/29/2019									
3/25/2019	<0.1		0.072 (J)						0.087 (J)
3/26/2019		0.19 (J)		0.065 (J)	0.088 (J)	0.076 (J)	0.16	0.072 (J)	
9/10/2019	0.044 (J)	0.15	0.068 (J)	0.076 (J)	0.083 (J)	0.07 (J)	0.098 (J)	0.073 (J)	0.075 (J)
3/9/2020	0.061 (J)								0.19
3/10/2020		0.18	0.055 (J)	0.045 (J)	0.084 (J)	0.05 (J)	0.086 (J)	0.058 (J)	
9/16/2020	0.042 (J)		0.08 (J)	0.076 (J)		0.076 (J)			0.18
9/17/2020		0.25			0.11		0.15	0.083 (J)	
3/23/2021	0.038 (J)			0.082 (J)					0.081 (J)
3/24/2021		0.35	0.091 (J)		0.11	0.11	0.27	0.092 (J)	
8/23/2021	0.048 (J)								0.12
8/24/2021			0.1	0.1		0.095 (J)		0.11	
8/25/2021		0.15			0.038 (J)		0.097 (J)		
2/22/2022	<0.1		<0.1	0.034 (J)			0.047 (J)		<0.1
2/23/2022		0.22			0.05 (J)	0.075 (J)		0.086 (J)	

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	0.14 (J)	
8/15/2016		
8/16/2016	0.29	
9/28/2016		
9/29/2016	0.26	
11/16/2016	0.25	
1/16/2017		
1/17/2017		
1/18/2017	0.26	
1/19/2017		
3/2/2017	0.28	
4/18/2017		
4/19/2017		
4/25/2017	0.25	
7/13/2017	0.21	
10/10/2017	0.22	
3/29/2018	0.23	
3/30/2018		
6/12/2018	0.23	
6/13/2018		
10/9/2018		
10/10/2018	0.25	
1/29/2019		<0.1
3/25/2019		0.067 (J)
3/26/2019	0.22	
9/10/2019	0.2	0.052 (J)
3/9/2020		
3/10/2020	0.15	0.048 (J)
9/16/2020	0.26	0.078 (J)
9/17/2020		
3/23/2021		0.096 (J)
3/24/2021	0.27	
8/23/2021		
8/24/2021		0.11
8/25/2021	0.19	
2/22/2022	0.093 (J)	<0.1
2/23/2022		

# Prediction Limit

Constituent: pH (SU) Analysis Run 5/23/2022 4:35 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-8	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	5.94	7.13	7.81	7.4	5.96				
5/6/2016						7.41	6.64	6.85	
6/20/2016	5.84 (D)			7.63					7.82
6/21/2016		7.25	7.2		6	7.41	6.99	6.98	
8/15/2016	5.65	7.04	7.04	7.54	5.26				7.52
8/16/2016						7.33	6.48	6.73	
9/28/2016	5.72	7.09	7	7.45	5.66		6.7		7.66
9/29/2016						7.42		6.81	
11/16/2016	5.65	7.6	6.73	7.39	5.33	7.87	6.66	6.69	7.51
1/16/2017	5.52								
1/17/2017		6.99	6.61	7.23	5.24			6.77	7.52
1/18/2017						7.49			
1/19/2017							6.81		
3/2/2017	5.53	6.95	6.62	7.55	5.21	7.37	6.75	6.79	7.5
4/18/2017	5.64	7.02	6.7	7.43	5.85		6.93	6.77	7.75
4/19/2017						7.48			
4/25/2017									
7/13/2017									7.72
10/10/2017		7.27	6.48	5.62	5.6	7.29	6.99	7	
10/11/2017	6.11								6.35
3/29/2018	5.35	6.95	6.46	7.19			6.82		7.42
3/30/2018					5.16	7.31		6.68	
6/12/2018	6.23			7.55					8.02
6/13/2018		7.08	6.24		5.79	7.37	7.01	6.83	
10/9/2018	5.62 (D)			7.8 (D)					7.79 (D)
10/10/2018		7.01 (D)	6.12 (D)		5.15 (D)	7.41 (D)	7.04 (D)	6.69 (D)	
1/28/2019	5.49 (D)								7.4 (D)
1/29/2019		6.55 (D)	5.93 (D)	7.63 (D)	5.46 (D)	7.03 (D)	6.87 (D)	6.42 (D)	
3/25/2019	5.27 (D)			7.44 (D)					7.29 (D)
3/26/2019		6.57 (D)	5.19 (D)		7.14 (D)	6.68 (D)	7.01 (D)	5.96 (D)	
9/10/2019	5.97	6.99	6.03	7.41	5.1	7.26	7.09	6.67	7.54
1/28/2020	5.78	7.17	6.61	7.46					7.4
1/29/2020					5.76	7.3	7.19	6.68	
3/9/2020	5.46								7.58
3/10/2020		7	6.54	7.3	5.5	7.3	7.11	6.87	
9/16/2020	6.37	6.98		7.38		7.16			7.89
9/17/2020			6.39		5.22		6.95	6.68	
12/7/2020		7.2							
12/8/2020							7.41	7.04	
3/23/2021	5	6.74							7.06
3/24/2021			6.26	6.88	6.71	7.24	7.14	6.73	
8/23/2021	6.16								8.12
8/24/2021		7.11		7.78		7.42		6.92	
8/25/2021			6.85		5.26		7.27		
10/26/2021					5.99				
2/22/2022	5.38	7.14		7.57			7.32		7.6
2/23/2022			6.91		6.22	7.44		6.98	



# Prediction Limit

Constituent: pH (SU) Analysis Run 5/23/2022 4:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	7.61	
8/15/2016		
8/16/2016	7.17	
9/28/2016		
9/29/2016	6.97	
11/16/2016	7.03	
1/16/2017		
1/17/2017		
1/18/2017	7.01	
1/19/2017		
3/2/2017	7.02	
4/18/2017		
4/19/2017		
4/25/2017	7.02	
7/13/2017	7.17	
10/10/2017	7.24	
10/11/2017		
3/29/2018	6.93	
3/30/2018		
6/12/2018	7.29	
6/13/2018		
10/9/2018		
10/10/2018	7.12 (D)	
1/28/2019		
1/29/2019	8.02 (D)	6.93 (D)
3/25/2019		7.1 (D)
3/26/2019	7.29 (D)	
9/10/2019	10.96 (o)	7.15
1/28/2020	7.25	7.36
1/29/2020		
3/9/2020		
3/10/2020	7.53	7.04
9/16/2020	11.03 (o)	6.89
9/17/2020		
12/7/2020		
12/8/2020		
3/23/2021		6.56
3/24/2021	7.15	
8/23/2021		
8/24/2021		7.28
8/25/2021	7.44	
10/26/2021		
2/22/2022	7.41	7.2
2/23/2022		

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	2.46	17.8	144	116	4.47				
5/6/2016						94.2	106	445	
6/20/2016	2.5				7.7				1
6/21/2016		17	160	170		95	210	290	
8/15/2016	1.9	20	120	170	7.5				0.73 (J)
8/16/2016						88	120	270	
9/28/2016	1.9	21	130	170	7.8		110		<1
9/29/2016						94		280	
11/16/2016	1.7	20	130	170	6.7	97	130	280	<1
1/16/2017	<1								
1/17/2017		19	150	180	6.7	100			<1
1/18/2017								280	
1/19/2017							160		
3/2/2017	1.4	15	160	180	5.6	100	130	240	<1
4/18/2017	1.3	14	180	160	5.1	91	120		<1
4/19/2017								250	
4/25/2017									
7/13/2017									1.4
10/10/2017	1.1	11	260	180	4.9	110	170	240	0.87 (J)
6/12/2018	0.82 (J)				3.8				4.1
6/13/2018		8.7	330	180		110	130	220	
10/9/2018	0.82 (J)				6.7				2.2
10/10/2018		8.7	410	190		110	140	220	
1/29/2019									
3/25/2019	<1				3.4 (J)				<1
3/26/2019		6.3 (J)	420	180		110	130	190	
9/10/2019	1.1	5.6	420	180	4.7	110	140	180	1.8
3/9/2020	4.2								3.4
3/10/2020		5	370	170	5.2	130	140	170	
9/16/2020	0.69 (J)	2.7			3.2			160	3
9/17/2020			380	160		120	150		
3/23/2021	<1	3.2							1.4
3/24/2021			280	180	3.5	130	120	180	
8/23/2021	<1								3.4
8/24/2021		3.5			3.6	130		160	
8/25/2021			420	180			140		
2/22/2022	<1	5.4			3.2		150		1.1
2/23/2022			390	260		150		180	

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	4	
8/15/2016		
8/16/2016	2.8	
9/28/2016		
9/29/2016	<1	
11/16/2016	3	
1/16/2017		
1/17/2017		
1/18/2017	4.1	
1/19/2017		
3/2/2017	4.6	
4/18/2017		
4/19/2017		
4/25/2017	4.4	
7/13/2017	4.8	
10/10/2017	4.9	
6/12/2018	4.1	
6/13/2018		
10/9/2018		
10/10/2018	2.5	
1/29/2019		7.08
3/25/2019		1.8 (J)
3/26/2019	2.9 (J)	
9/10/2019	2.5	0.6 (J)
3/9/2020		
3/10/2020	7.8	2.4
9/16/2020	4.4	1
9/17/2020		
3/23/2021		1.7
3/24/2021	7.1	
8/23/2021		
8/24/2021		3.3
8/25/2021	6.6	
2/22/2022	4.8	2.1
2/23/2022		

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	78	281	287	272	129				
5/6/2016						380	282	661	
6/20/2016	80				156				188
6/21/2016		303	297	356		392	516	692	
8/15/2016	58	310	230	330	160				180
8/16/2016						360	360	650	
9/28/2016	29	170	130	180	91		190		100
9/29/2016						380		640	
11/16/2016	140	340	290	330	250	420	410	680	270
1/16/2017	36								
1/17/2017		310	240	310	140	380			170
1/18/2017								630	
1/19/2017							400		
3/2/2017	78	330	270	340	170	410	360	660	210
4/18/2017	16	290	310	300	140	360	360		160
4/19/2017								600	
4/25/2017									
7/13/2017									150
10/10/2017	78	310	450	340	190	400	480	600	210
6/12/2018	62				180				150
6/13/2018		230	600	320		320	390	570	
10/9/2018	68				170				150
10/10/2018		300	410	270		300	260	470	
1/29/2019									
3/25/2019	54				150				210
3/26/2019		290	630	320		370	370	530	
9/10/2019	14	260	660	260	110	360	360	470	160
3/9/2020	56								190
3/10/2020		300	600	370	170	390	450	540	
9/16/2020	44	300			150			530	150
9/17/2020			740	320		410	460		
3/23/2021	53	300							220
3/24/2021			530	330	150	430	380	490	
8/23/2021	55								200
8/24/2021		300			160	450		510	
8/25/2021			720	390			470		
2/22/2022	38	300			150		420		210
2/23/2022			630	390		450		490	

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/23/2022 4:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	177	
8/15/2016		
8/16/2016	160	
9/28/2016		
9/29/2016	190	
11/16/2016	240	
1/16/2017		
1/17/2017		
1/18/2017	180	
1/19/2017		
3/2/2017	170	
4/18/2017		
4/19/2017		
4/25/2017	170	
7/13/2017	150	
10/10/2017	160	
6/12/2018	170	
6/13/2018		
10/9/2018		
10/10/2018	48	
1/29/2019		280
3/25/2019		250
3/26/2019	180	
9/10/2019	140	230
3/9/2020		
3/10/2020	170	260
9/16/2020	190	320
9/17/2020		
3/23/2021		270
3/24/2021	190	
8/23/2021		
8/24/2021		280
8/25/2021	230	
2/22/2022	190	270
2/23/2022		

FIGURE E.

# Appendix III Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 4:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-6 (bg)	-0.02061	-104	-68	Yes	18	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2895	-101	-68	Yes	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.06861	109	68	Yes	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.7274	78	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-10 (bg)	-0.4171	-75	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.185	-77	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.199	-129	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.3857	-22	-21	Yes	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.886	-127	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.6906	-116	-68	Yes	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.04682	-101	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.304	-90	-68	Yes	18	27.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.6861	-91	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-3.372	-119	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-27.24	-126	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	7.58	117	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	59.07	102	68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-36.03	-109	-68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	89.13	101	68	Yes	18	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

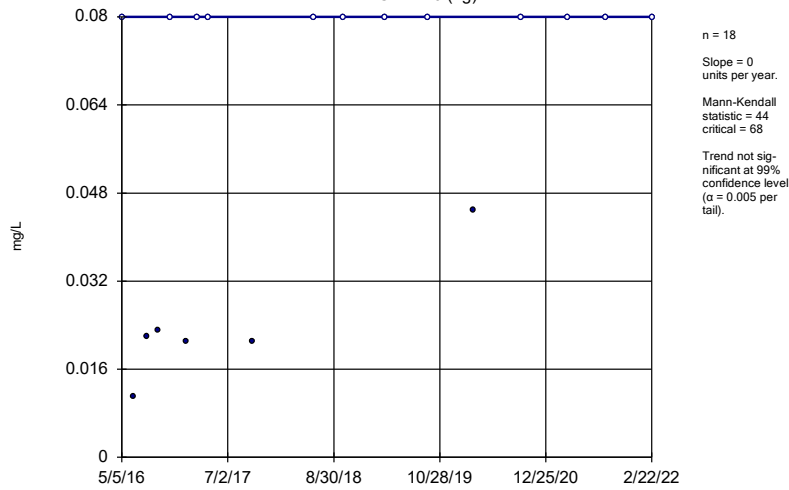
Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 5/23/2022, 4:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	44	68	No	18	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	20	68	No	18	61.11	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	29	68	No	18	88.89	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-0.02061</b>	<b>-104</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>16.67</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWA-6A (bg)	0	2	21	No	8	75	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1685	65	68	No	18	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>-0.2895</b>	<b>-101</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWC-3	0	8	68	No	18	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.06861</b>	<b>109</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.7274</b>	<b>78</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.4171</b>	<b>-75</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	MGWA-11 (bg)	0	-3	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-5 (bg)	-0.1736	-22	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6 (bg)	0	13	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6A (bg)	-0.643	-1	-21	No	8	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-3	2.173	50	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-10 (bg)	0	1	68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.02392	-9	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.185</b>	<b>-77</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-1.199</b>	<b>-129</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6A (bg)</b>	<b>-0.3857</b>	<b>-22</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-1	0	-21	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>-1.886</b>	<b>-127</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-3	0.185	64	68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.6906</b>	<b>-116</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-8	0.2771	65	68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-10 (bg)	0	-47	-74	No	19	63.16	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	0.003202	20	74	No	19	10.53	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.003692	-38	-74	No	19	21.05	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.002711	-32	-74	No	19	31.58	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0.01291	9	21	No	8	25	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.04682</b>	<b>-101</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.304</b>	<b>-90</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>27.78</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-11 (bg)	0.2448	58	68	No	18	33.33	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.6861</b>	<b>-91</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-3.372</b>	<b>-119</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-6A (bg)	0.02637	0	21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	3.959	39	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>-27.24</b>	<b>-126</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-3</b>	<b>7.58</b>	<b>117</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWC-7	3.104	56	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-8</b>	<b>59.07</b>	<b>102</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWA-10 (bg)	-5.208	-50	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	0.5376	14	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	0	4	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	0	-12	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	8.255	6	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	12.37	35	68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>-36.03</b>	<b>-109</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWC-3	8.026	39	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	10.03	35	68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>89.13</b>	<b>101</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>



### Sen's Slope Estimator

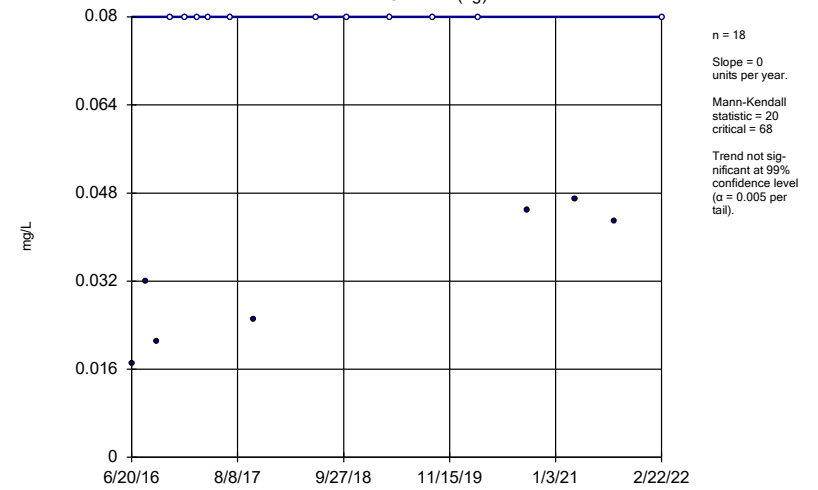
MGWA-10 (bg)



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

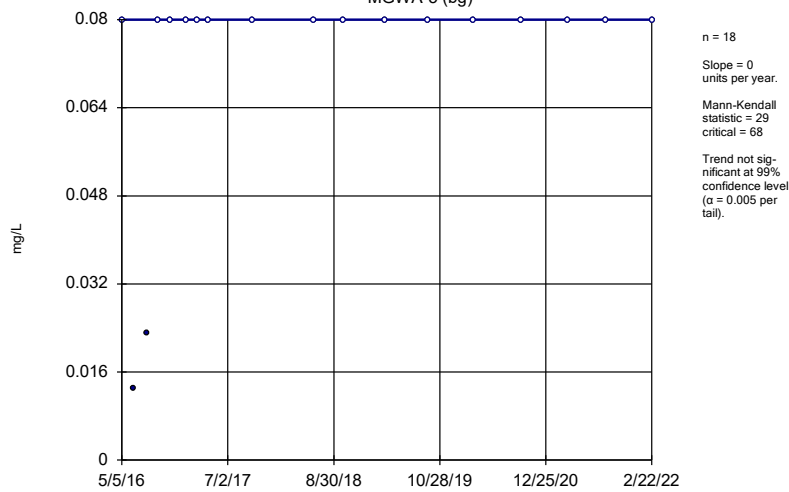
MGWA-11 (bg)



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

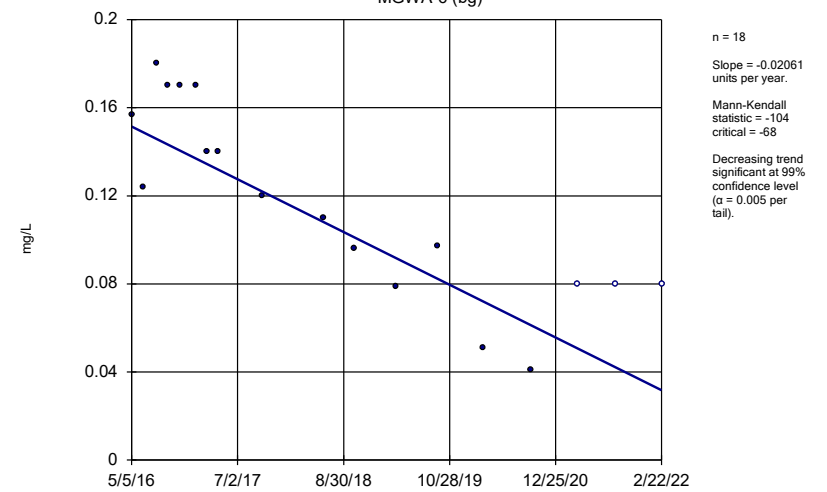
MGWA-5 (bg)



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

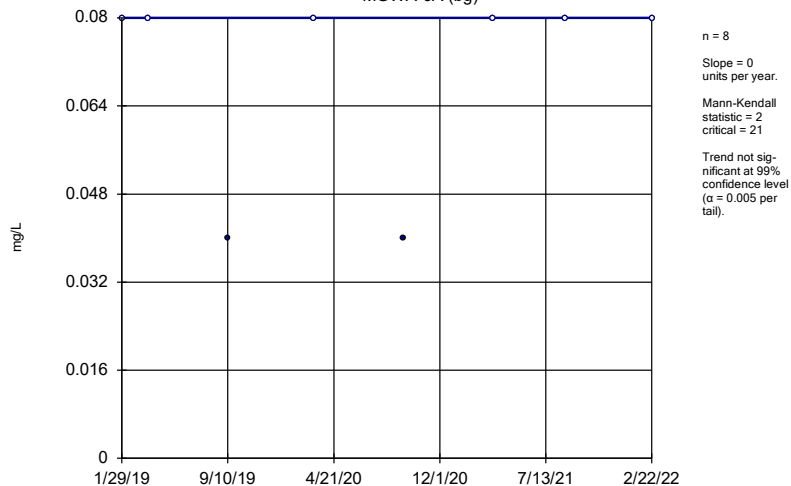
MGWA-6 (bg)



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

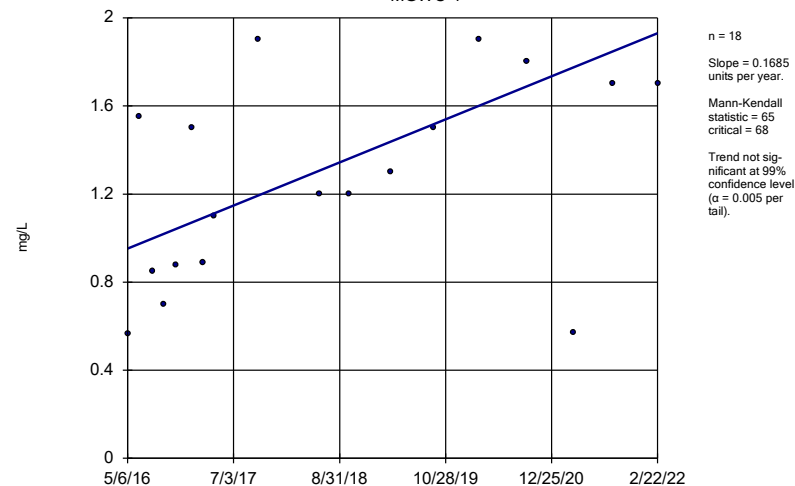
MGWA-6A (bg)



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

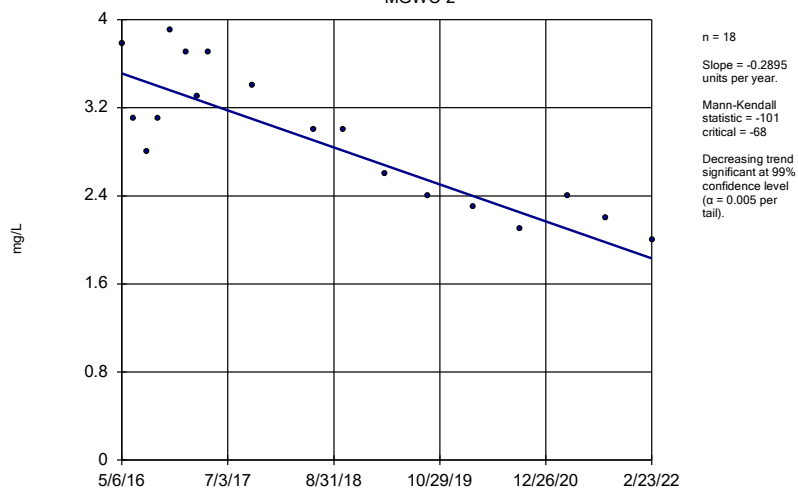
MGWC-1



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

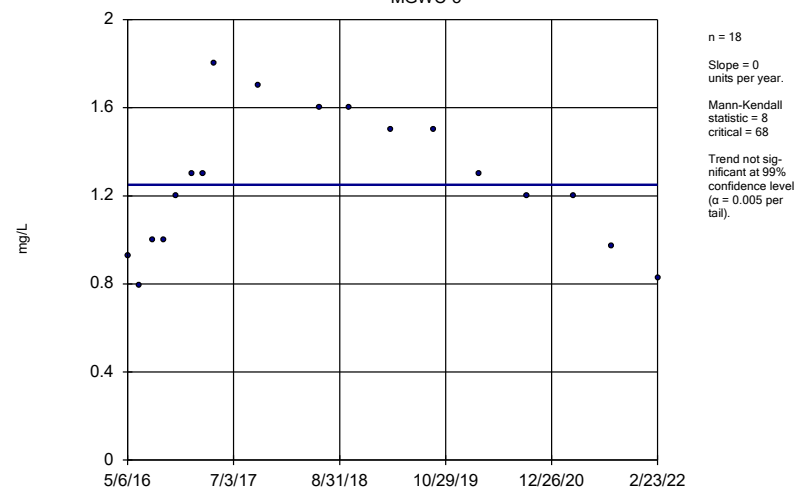
MGWC-2



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

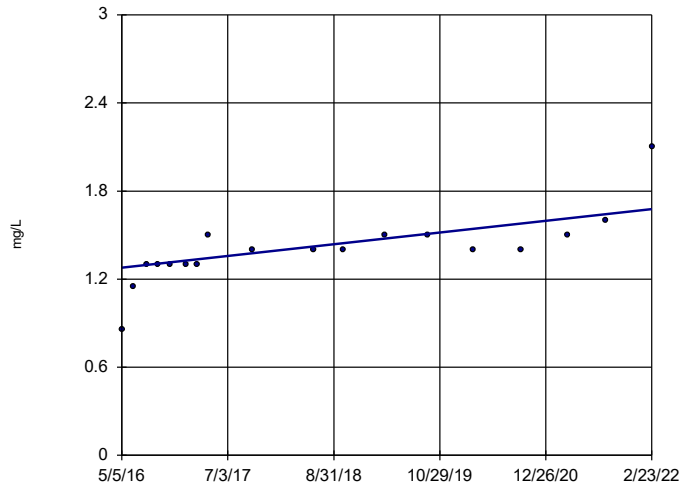
### Sen's Slope Estimator

MGWC-3



Constituent: Boron Analysis Run 5/23/2022 4:36 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

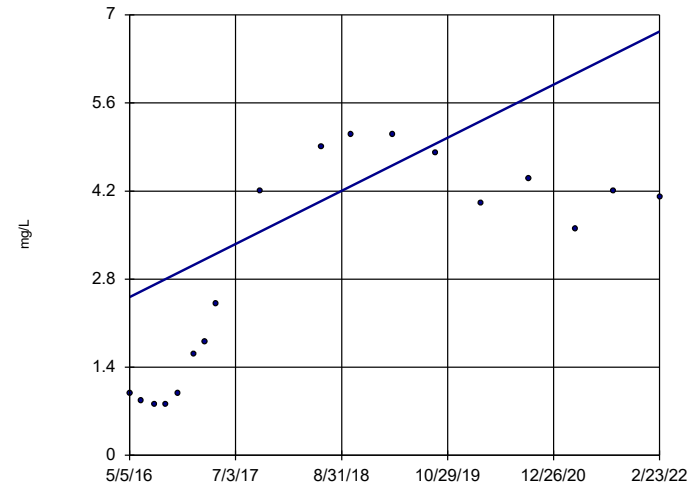
Sen's Slope Estimator  
MGWC-7



n = 18  
Slope = 0.06861 units per year.  
Mann-Kendall statistic = 109  
critical = 68  
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

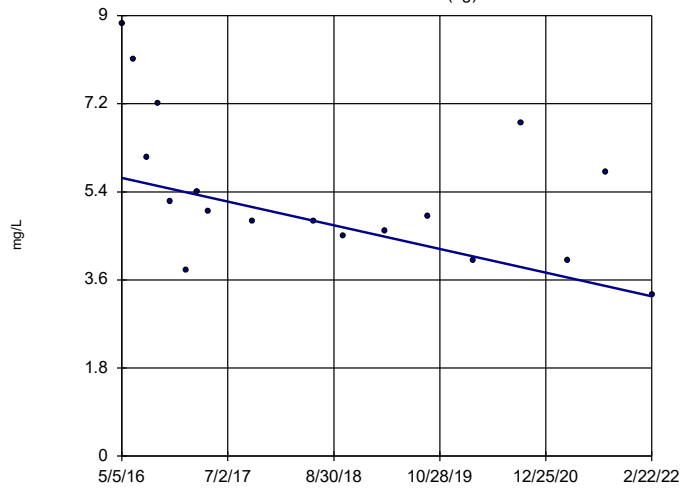
Sen's Slope Estimator  
MGWC-8



n = 18  
Slope = 0.7274 units per year.  
Mann-Kendall statistic = 78  
critical = 68  
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

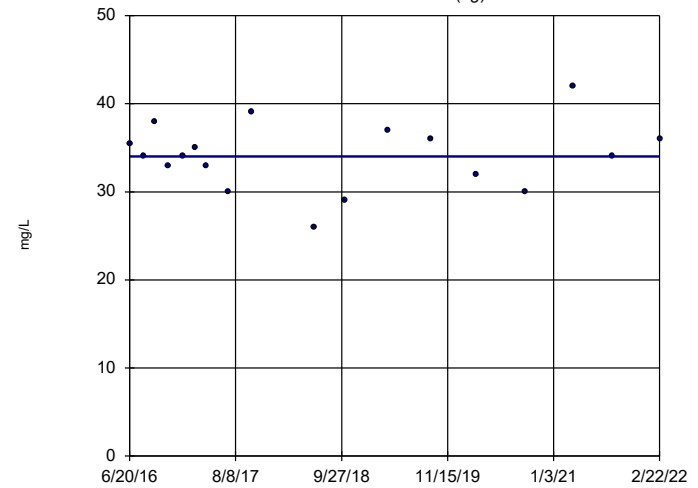
Sen's Slope Estimator  
MGWA-10 (bg)



n = 18  
Slope = -0.4171 units per year.  
Mann-Kendall statistic = -75  
critical = -68  
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

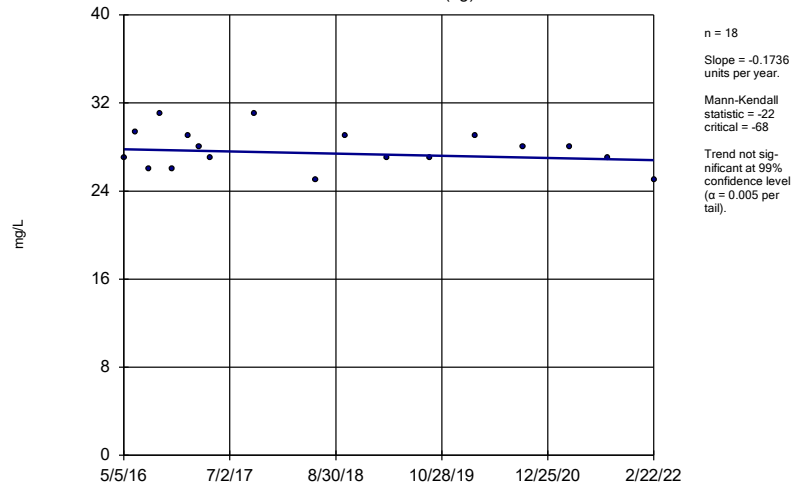
Sen's Slope Estimator  
MGWA-11 (bg)



n = 18  
Slope = 0 units per year.  
Mann-Kendall statistic = -3  
critical = -68  
Trend not significant at 99% confidence level (α = 0.005 per tail).

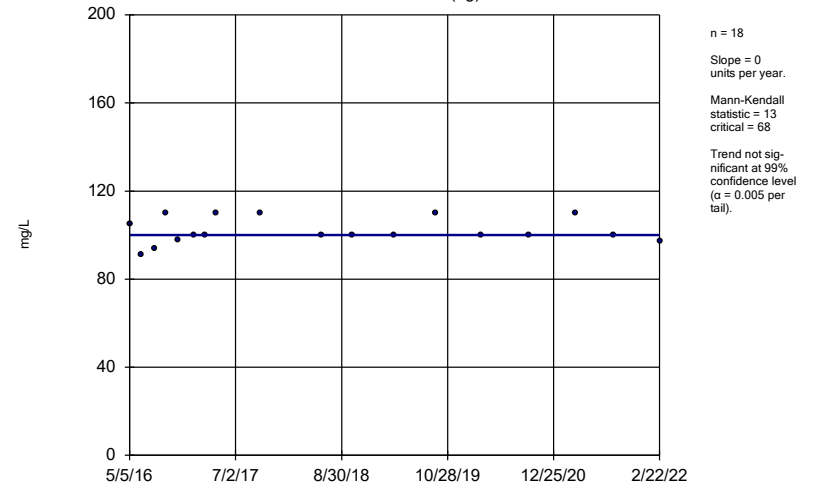
Constituent: Calcium Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-5 (bg)



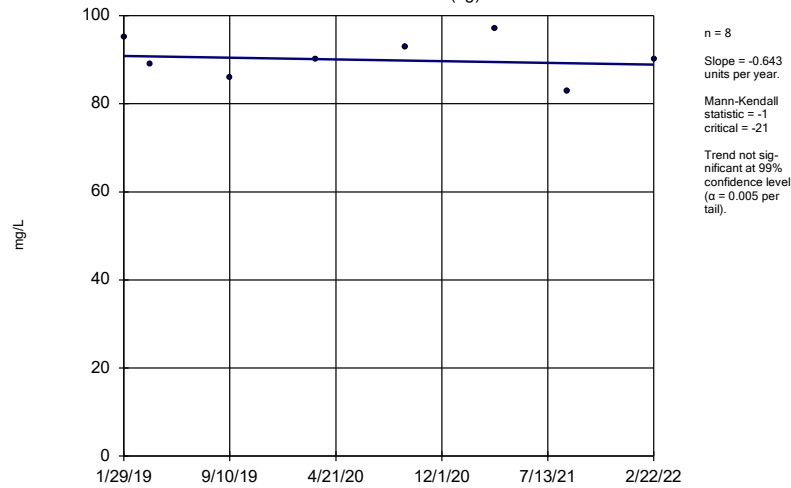
Constituent: Calcium Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-6 (bg)



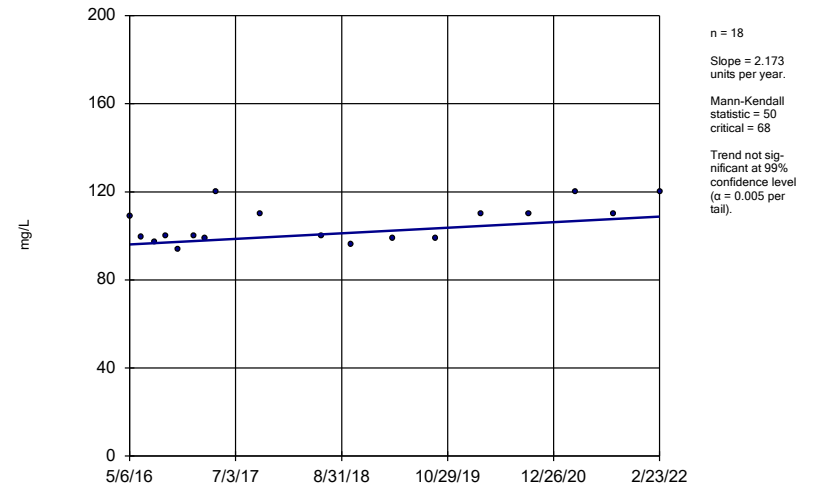
Constituent: Calcium Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-6A (bg)



Constituent: Calcium Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

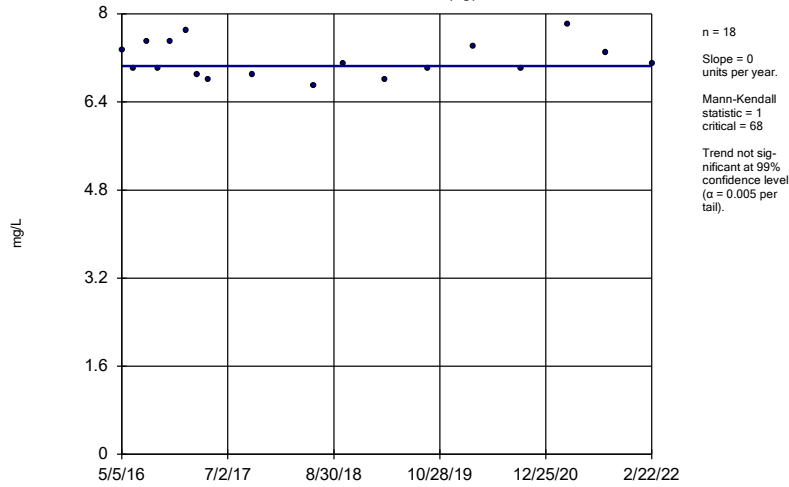
Sen's Slope Estimator  
MGWC-3



Constituent: Calcium Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

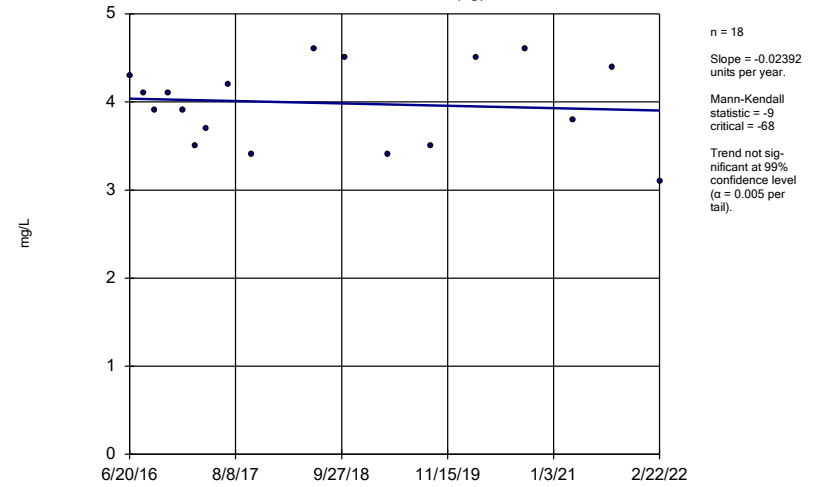
MGWA-10 (bg)



Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

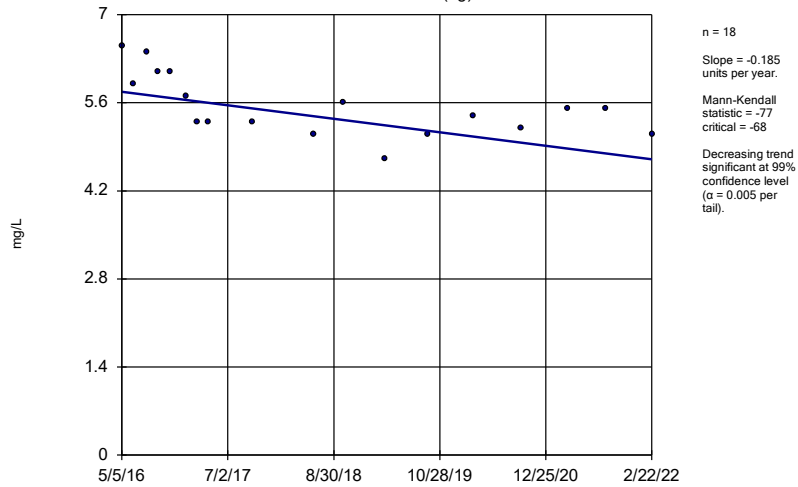
MGWA-11 (bg)



Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

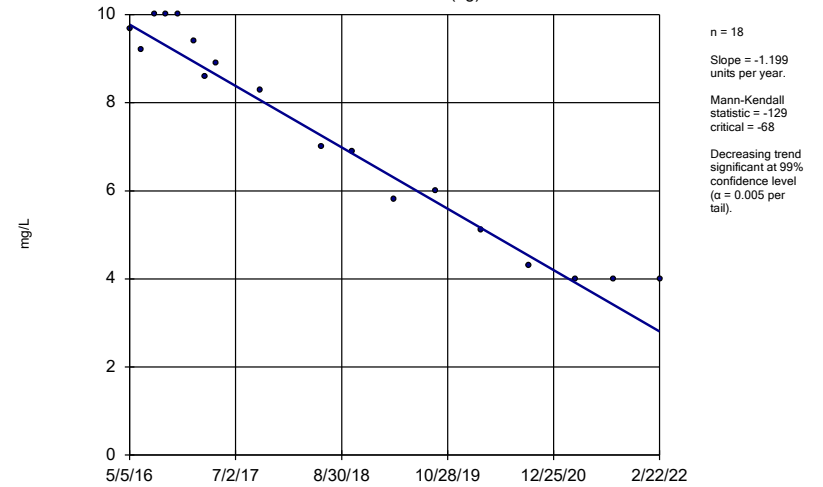
MGWA-5 (bg)



Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

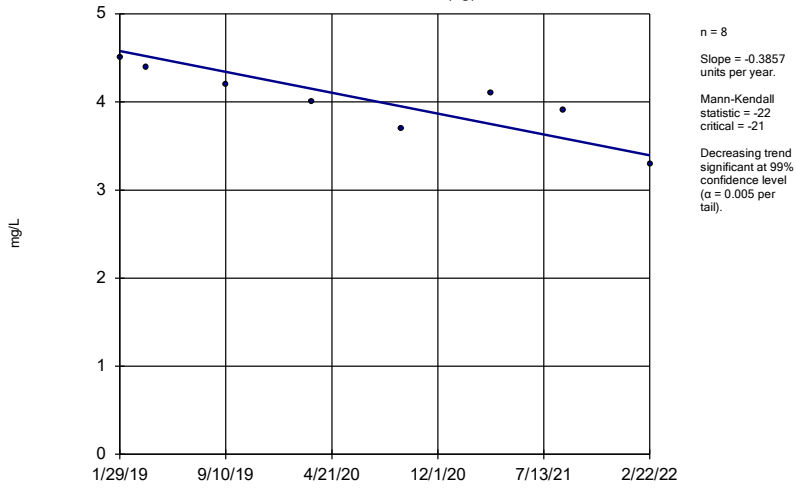
### Sen's Slope Estimator

MGWA-6 (bg)



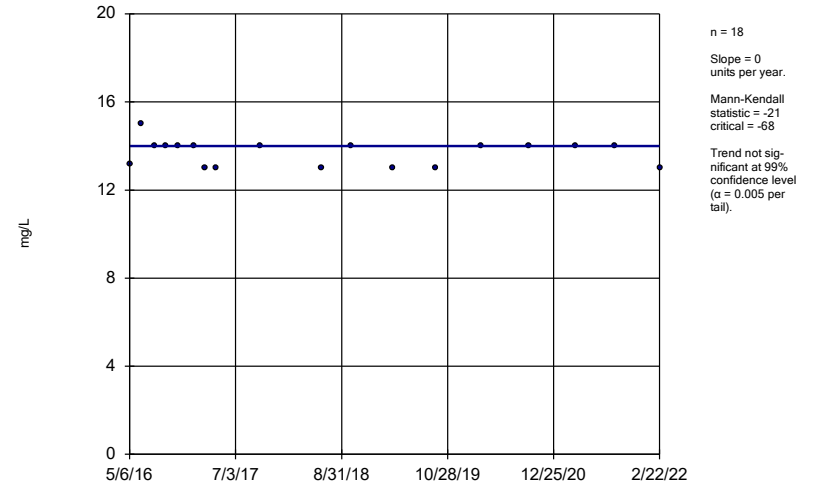
Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-6A (bg)



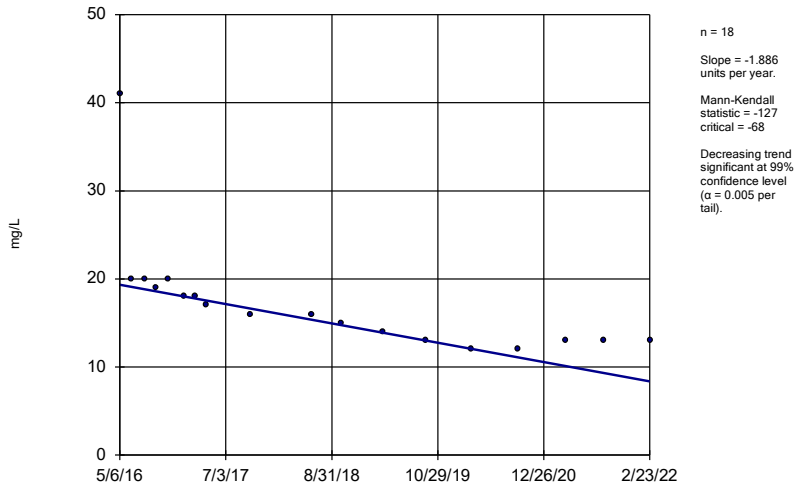
Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-1



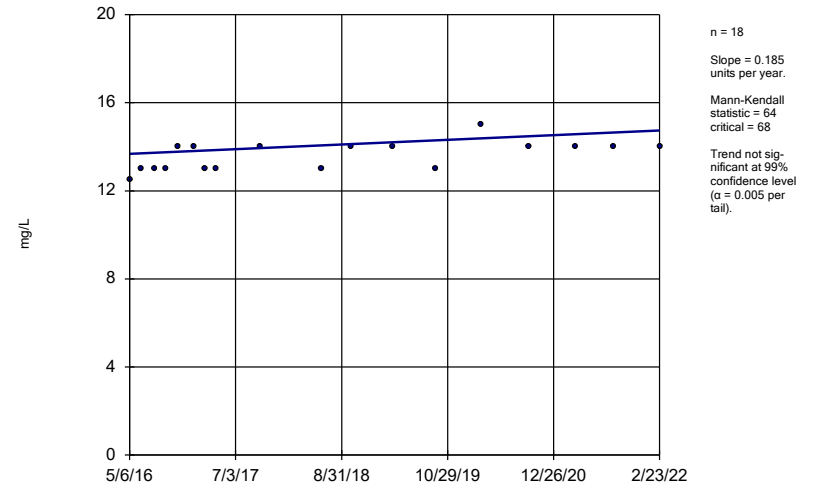
Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-2



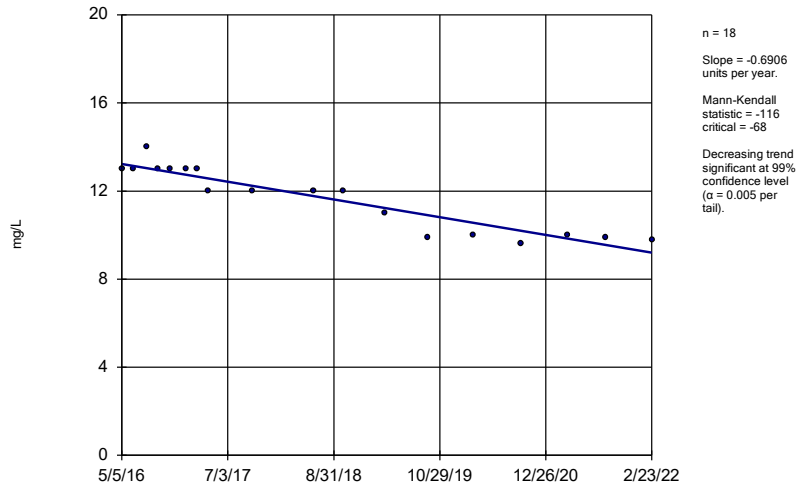
Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-3



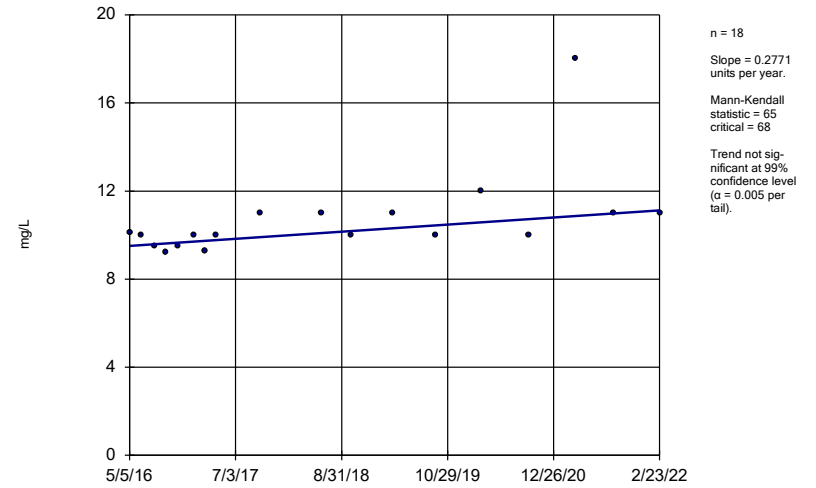
Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-7



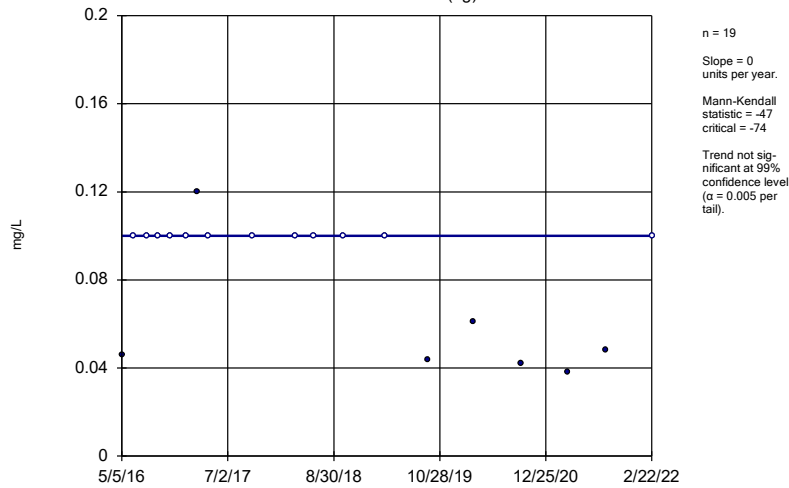
Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-8



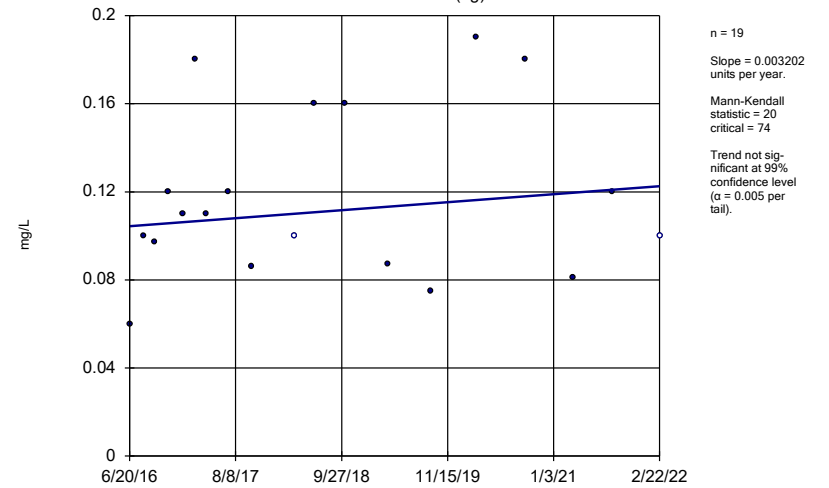
Constituent: Chloride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-10 (bg)



Constituent: Fluoride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

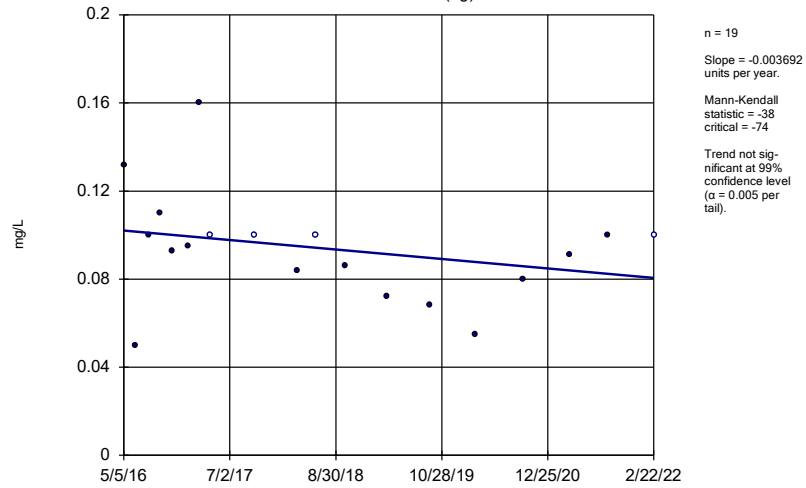
Sen's Slope Estimator  
MGWA-11 (bg)



Constituent: Fluoride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

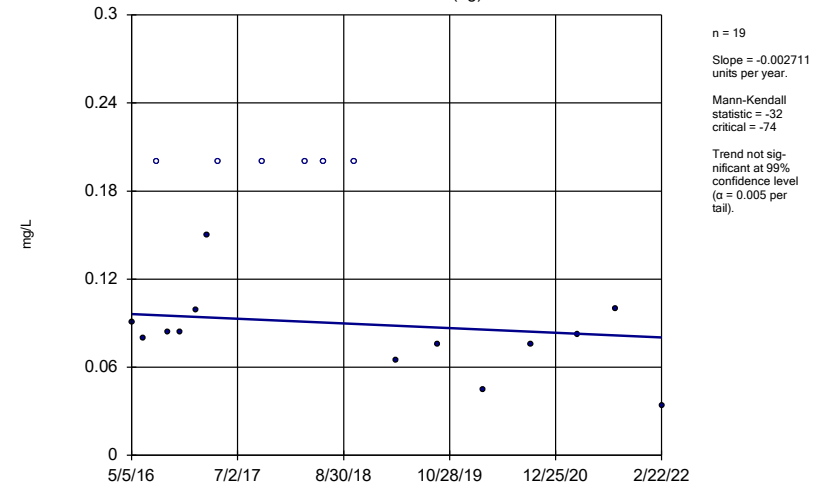
MGWA-5 (bg)



Constituent: Fluoride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

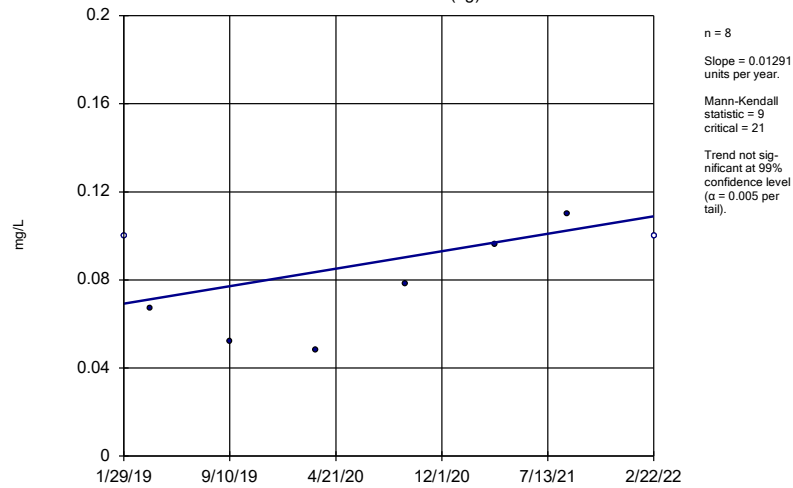
MGWA-6 (bg)



Constituent: Fluoride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

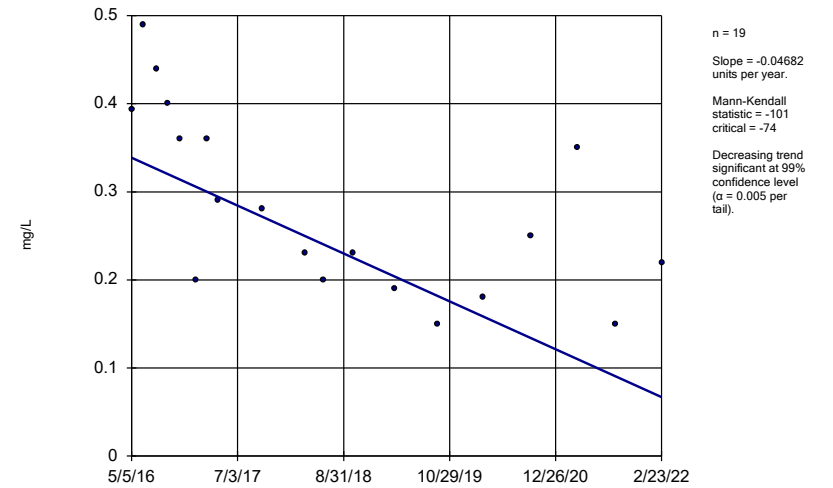
MGWA-6A (bg)



Constituent: Fluoride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

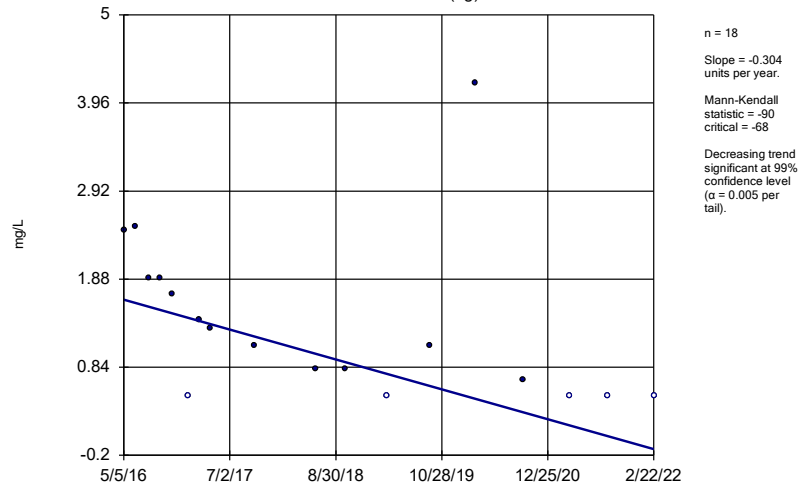
MGWC-7



Constituent: Fluoride Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

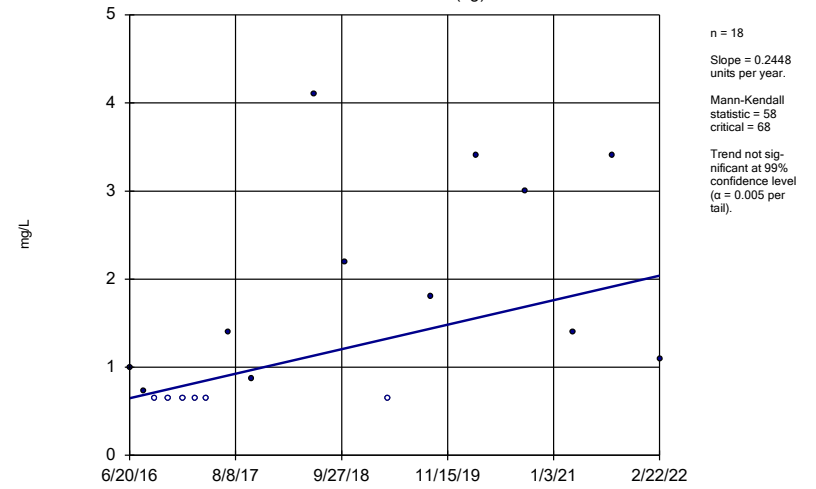


Sen's Slope Estimator  
MGWA-10 (bg)



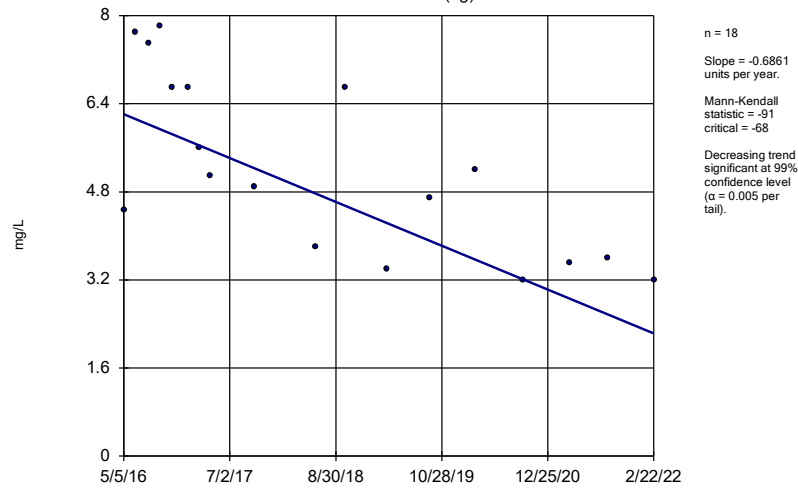
Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-11 (bg)



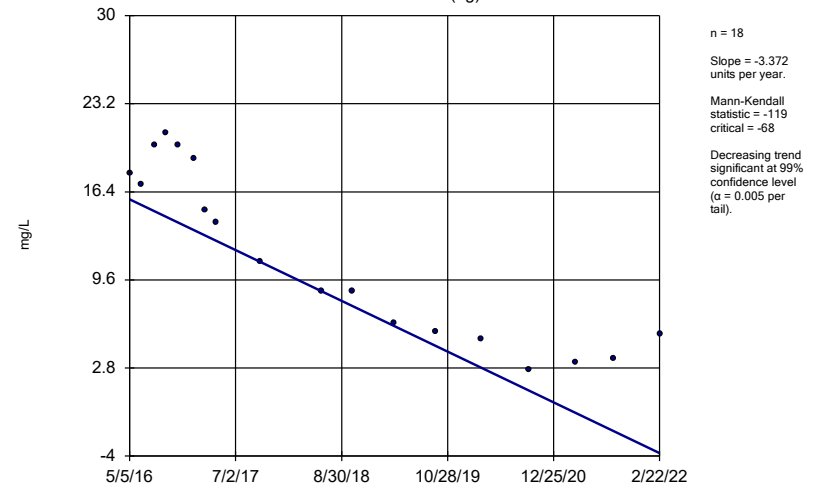
Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-5 (bg)



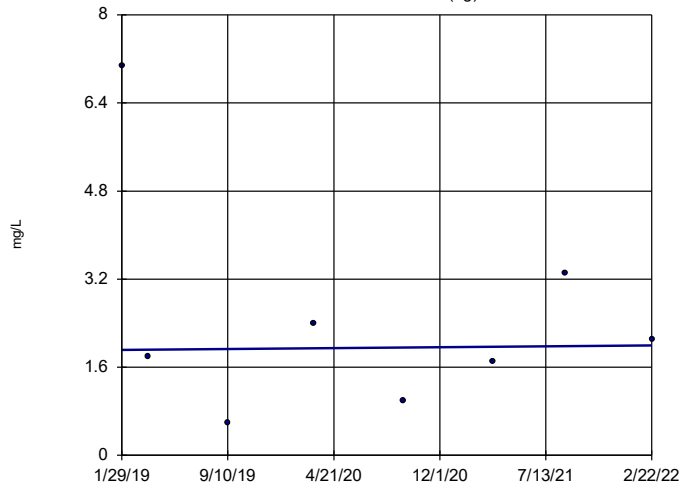
Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-6 (bg)



Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

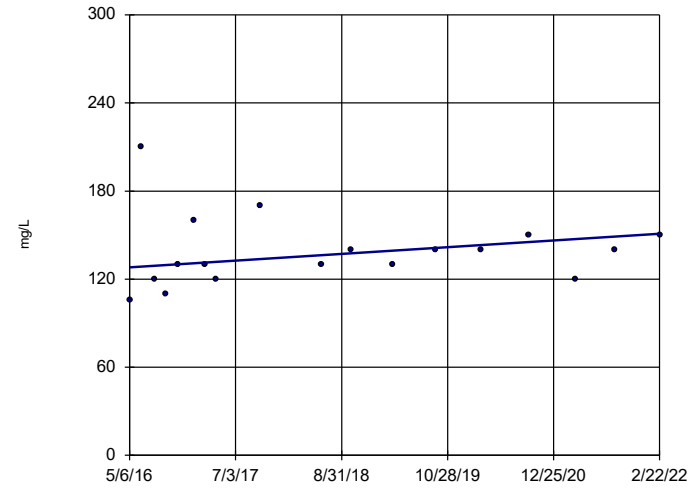
### Sen's Slope Estimator MGWA-6A (bg)



n = 8  
 Slope = 0.02637  
 units per year.  
 Mann-Kendall  
 statistic = 0  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

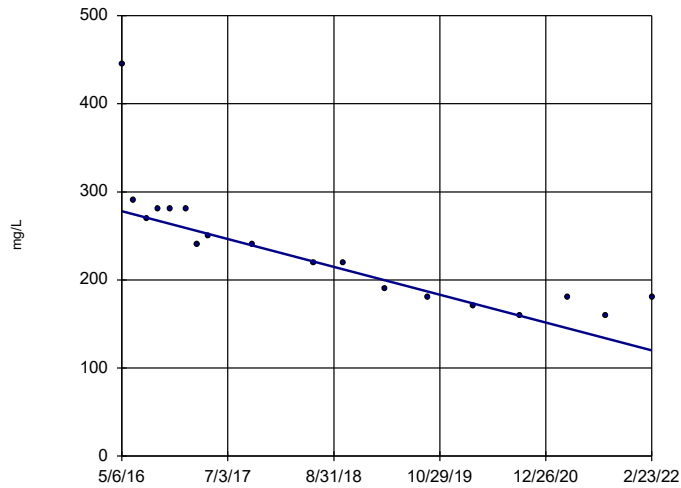
### Sen's Slope Estimator MGWC-1



n = 18  
 Slope = 3.959  
 units per year.  
 Mann-Kendall  
 statistic = 39  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

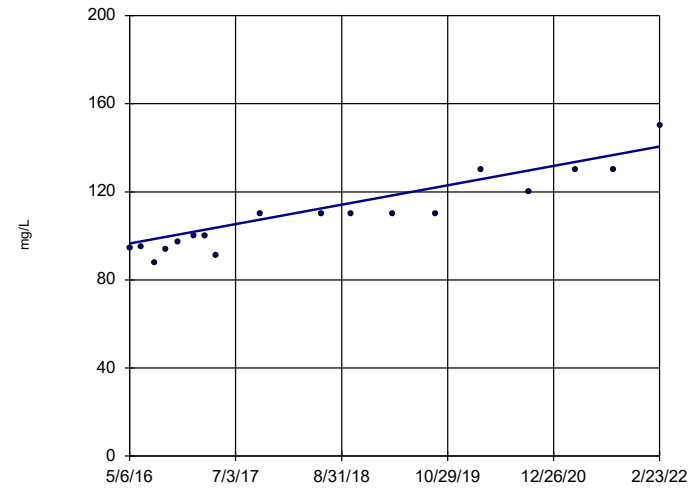
### Sen's Slope Estimator MGWC-2



n = 18  
 Slope = -27.24  
 units per year.  
 Mann-Kendall  
 statistic = -126  
 critical = -68  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

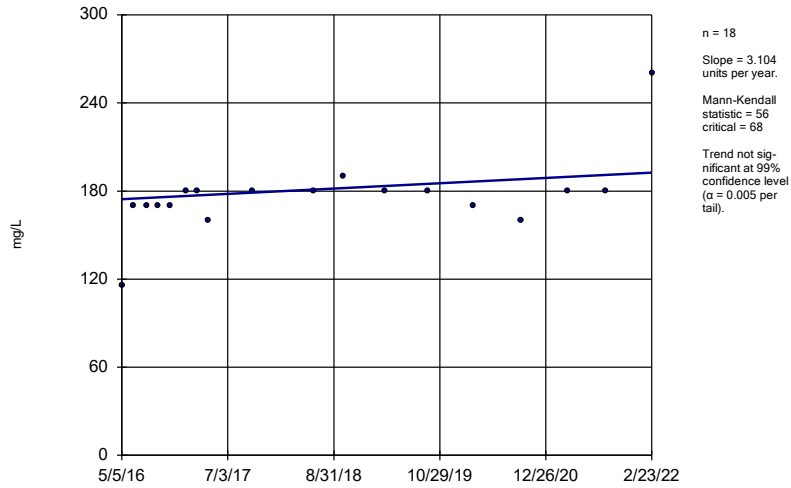
### Sen's Slope Estimator MGWC-3



n = 18  
 Slope = 7.58  
 units per year.  
 Mann-Kendall  
 statistic = 117  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

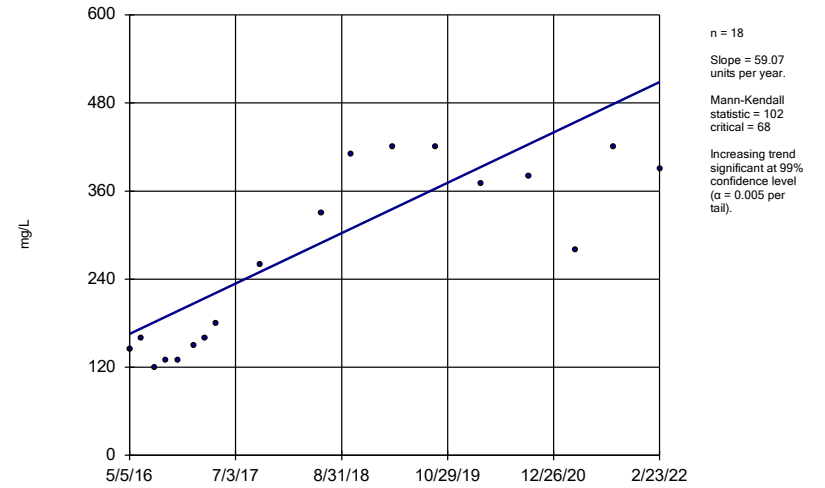
Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-7



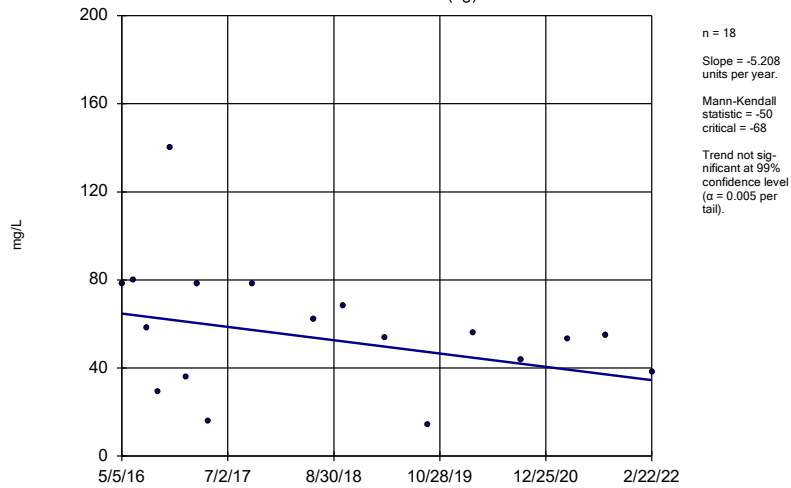
Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-8



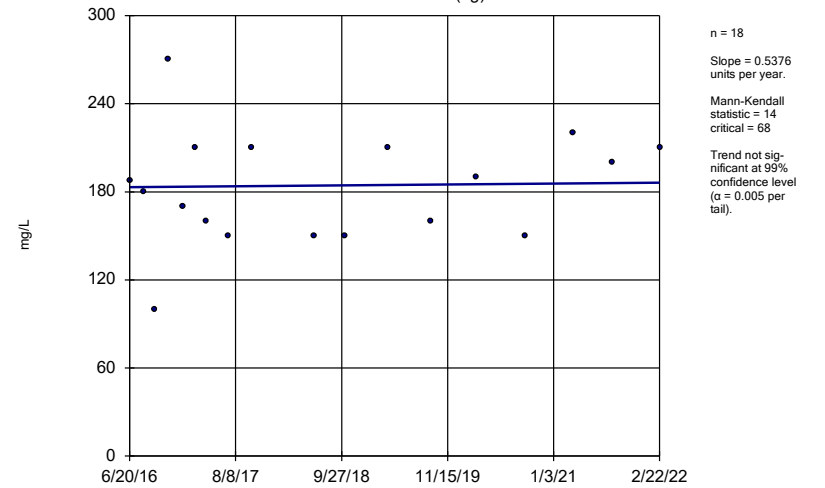
Constituent: Sulfate Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-10 (bg)



Constituent: TDS Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

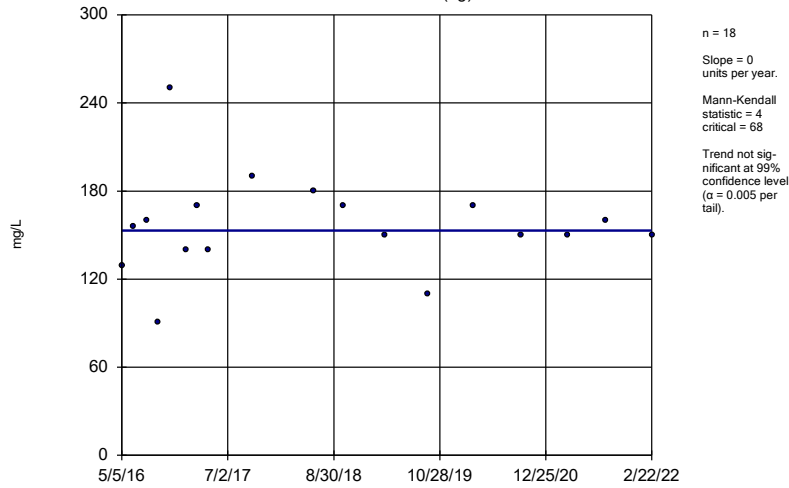
Sen's Slope Estimator  
MGWA-11 (bg)



Constituent: TDS Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

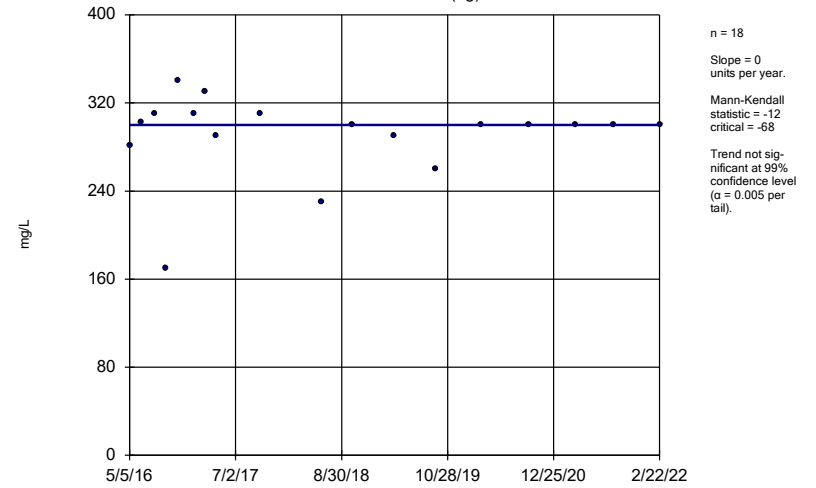
MGWA-5 (bg)



Constituent: TDS Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

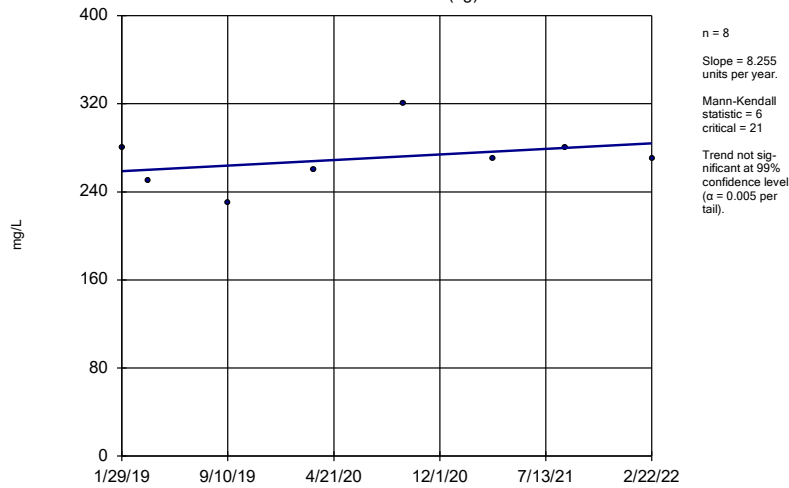
MGWA-6 (bg)



Constituent: TDS Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

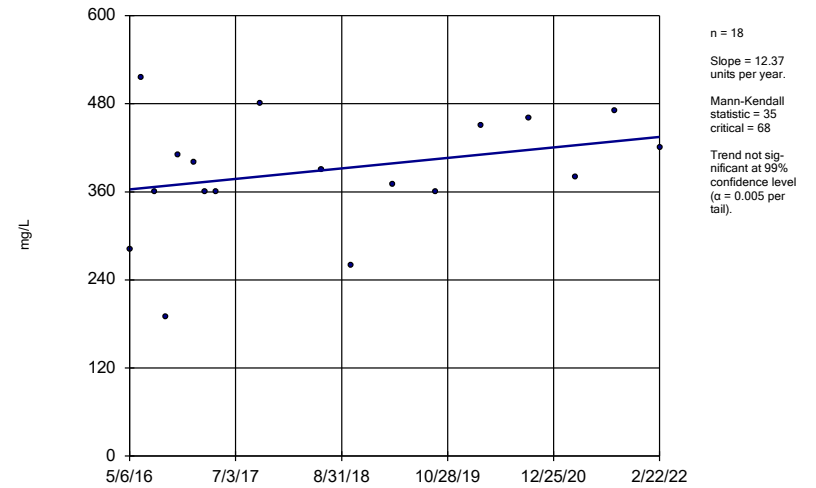
MGWA-6A (bg)



Constituent: TDS Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWC-1



Constituent: TDS Analysis Run 5/23/2022 4:37 PM View: Appendix III - Trend Tests  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



FIGURE F.

# Upper Tolerance Limit Summary Table

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 4:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.002	n/a	n/a	n/a	n/a	71	n/a	n/a	90.14	n/a	n/a	0.0262	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.014	n/a	n/a	n/a	n/a	81	n/a	n/a	35.8	n/a	n/a	0.01569	NP Inter(normality)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	n/a	89	n/a	n/a	0	n/a	n/a	0.01041	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	79	n/a	n/a	93.67	n/a	n/a	0.01738	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	89	n/a	n/a	98.88	n/a	n/a	0.01041	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0063	n/a	n/a	n/a	n/a	79	n/a	n/a	70.89	n/a	n/a	0.01738	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	89	n/a	n/a	74.16	n/a	n/a	0.01041	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.141	n/a	n/a	n/a	n/a	90	0.5681	0.2949	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.19	n/a	n/a	n/a	n/a	84	n/a	n/a	30.95	n/a	n/a	0.01345	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	71	n/a	n/a	92.96	n/a	n/a	0.0262	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	n/a	89	n/a	n/a	29.21	n/a	n/a	0.01041	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a	79	n/a	n/a	96.2	n/a	n/a	0.01738	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	n/a	79	n/a	n/a	60.76	n/a	n/a	0.01738	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	59	n/a	n/a	89.83	n/a	n/a	0.04849	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	79	n/a	n/a	81.01	n/a	n/a	0.01738	NP Inter(NDs)

FIGURE G.



<b>PLANT MCINTOSH AP 1 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006		0.002	0.006
Arsenic, Total (mg/L)	0.01		0.014	0.014
Barium, Total (mg/L)	2		0.13	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.0063	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0025	0.006
Combined Radium, Total (pCi/L)	5		1.14	5
Fluoride, Total (mg/L)	4		0.19	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.015	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*GWPS = Groundwater Protection Standard*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

FIGURE H.

# Confidence Intervals - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 6/2/2022, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	MGWC-7	0.01018	0.007454	0.006	Yes	20	0.008815	0.002397	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01653	0.007613	0.006	Yes	20	0.01207	0.007847	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	20	0.1211	0.02015	0	None	No	0.01	NP (normality)

# Confidence Intervals - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 6/2/2022, 11:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MGWC-12	0.002	0.0004	0.006	No	16	0.0019	0.0004	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	16	0.001894	0.000425	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	16	0.001998	0.0000075	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002888	0.001978	0.014	No	20	0.002433	0.0008013	0	None	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001111	0.0006611	0.014	No	20	0.00098	0.0003666	30	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	20	0.0009045	0.0002067	80	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.001658	0.001369	0.014	No	20	0.001492	0.0003034	5	None	x^2	0.01	Param.
Arsenic (mg/L)	MGWC-7	0.0008456	0.000518	0.014	No	20	0.0008245	0.0002843	35	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00099	0.014	No	20	0.0009025	0.0002008	75	Kaplan-Meier	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	20	0.1072	0.01679	0	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06567	0.04922	2	No	20	0.05745	0.01448	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.05445	0.04909	2	No	20	0.05177	0.004721	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.1553	0.14	2	No	20	0.1477	0.0134	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.014	0.01	2	No	20	0.01295	0.006858	5	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.03885	0.03307	2	No	20	0.03607	0.005348	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	18	0.002371	0.0005468	94.44	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	18	0.002378	0.0005162	94.44	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001266	0.0006815	0.004	No	18	0.001323	0.0007309	16.67	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	20	0.002165	0.0008213	85	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.00318	0.001313	0.005	No	20	0.002444	0.001915	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00023	0.005	No	20	0.002386	0.0005076	95	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.001201	0.0005164	0.005	No	20	0.001461	0.00113	30	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.002	0.1	No	18	0.002089	0.0003771	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.002	0.1	No	18	0.003567	0.006354	88.89	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	18	0.002072	0.0003064	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	18	0.002056	0.0002357	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	18	0.00205	0.0003569	88.89	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.002	0.1	No	18	0.002061	0.0002593	94.44	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.0004	0.006	No	20	0.001681	0.001049	60	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	20	0.002333	0.0005581	90	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.00333	0.002554	0.006	No	20	0.002942	0.000684	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	20	0.000881	0.0007174	15	None	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>MGWC-7</b>	<b>0.01018</b>	<b>0.007454</b>	<b>0.006</b>	<b>Yes</b>	<b>20</b>	<b>0.008815</b>	<b>0.002397</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.01653</b>	<b>0.007613</b>	<b>0.006</b>	<b>Yes</b>	<b>20</b>	<b>0.01207</b>	<b>0.007847</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.665	1.256	5	No	21	1.46	0.3715	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7283	0.4259	5	No	20	0.5771	0.2662	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.732	0.4444	5	No	20	0.5882	0.2533	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.627	1.335	5	No	21	1.481	0.2642	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.288	0.9211	5	No	20	1.104	0.3229	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	2.018	1.422	5	No	20	1.72	0.524	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.2402	0.1449	4	No	19	0.1925	0.0814	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.2538	0.1938	4	No	19	0.2238	0.05123	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.1094	0.07245	4	No	19	0.09747	0.03011	36.84	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	MGWC-3	0.11	0.082	4	No	19	0.09974	0.03667	31.58	None	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3423	0.2223	4	No	19	0.2823	0.1025	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.11	0.084	4	No	19	0.09868	0.02762	15.79	None	No	0.01	NP (normality)
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	16	0.0009438	0.000225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	16	0.0009056	0.0002587	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	16	0.0009513	0.000195	93.75	None	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01246	0.01027	0.04	No	20	0.01137	0.001925	5	None	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.02169	0.01585	0.04	No	20	0.01877	0.00515	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.006782	0.005138	0.04	No	20	0.006094	0.001801	5	None	ln(x)	0.01	Param.
Lithium (mg/L)	MGWC-3	0.01342	0.0113	0.04	No	20	0.01236	0.00186	0	None	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>MGWC-7</b>	<b>0.13</b>	<b>0.112</b>	<b>0.04</b>	<b>Yes</b>	<b>20</b>	<b>0.1211</b>	<b>0.02015</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	MGWC-8	0.03863	0.02708	0.04	No	20	0.03286	0.01016	0	None	No	0.01	Param.

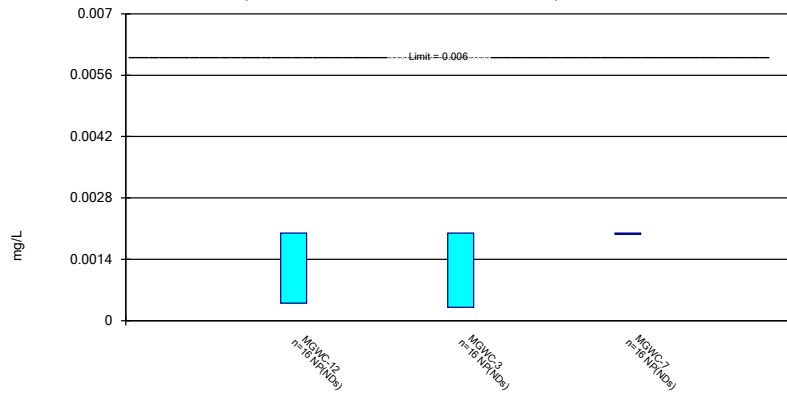
# Confidence Intervals - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 6/2/2022, 11:56 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.002	No	18	0.0001867	0.00003886	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.002	No	18	0.0001877	0.00003609	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.002	No	18	0.0001928	0.00003064	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.002	No	18	0.0001933	0.00002828	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00021	0.00014	0.002	No	19	0.0004135	0.0009031	42.11	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0012	0.1	No	18	0.004547	0.00577	22.22	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.002	0.1	No	18	0.01126	0.006218	72.22	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	18	0.01436	0.002708	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	18	0.01437	0.002663	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	14	0.004679	0.001203	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	14	0.004662	0.001264	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	14	0.004675	0.001216	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	14	0.004674	0.001219	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-7	0.005	0.00026	0.05	No	14	0.004661	0.001267	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.00038	0.05	No	14	0.003813	0.002011	71.43	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00016	0.002	No	18	0.0007669	0.0003893	72.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	18	0.0009122	0.0002563	88.89	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	18	0.0009561	0.0001862	94.44	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	18	0.0009183	0.0002404	88.89	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.0002481	0.000136	0.002	No	18	0.0003994	0.000342	22.22	Kaplan-Meier	ln(x)	0.01	Param.

### Non-Parametric Confidence Interval

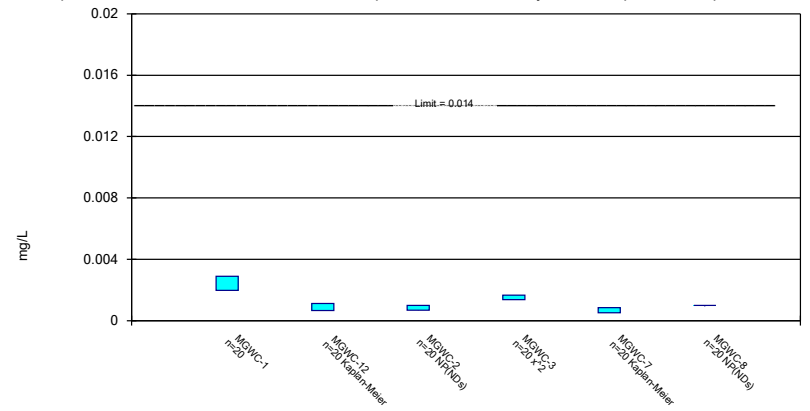
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

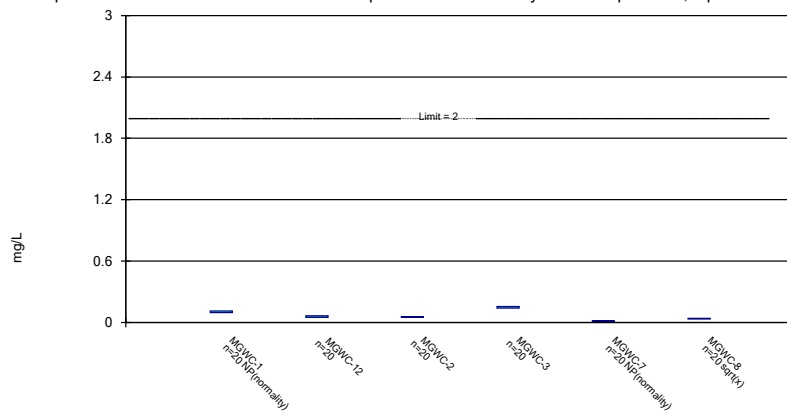
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

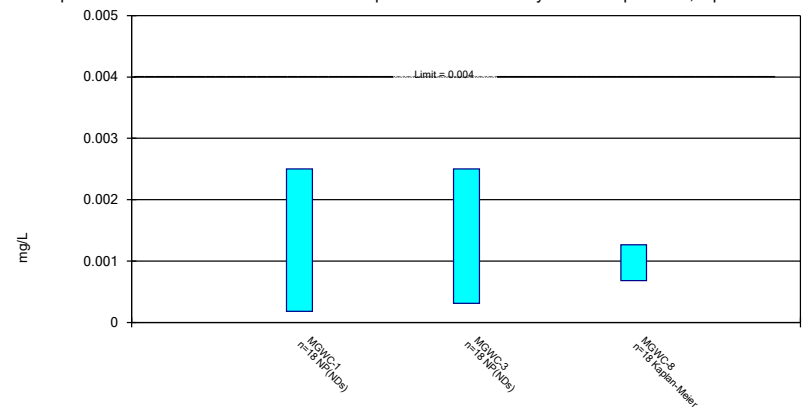
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

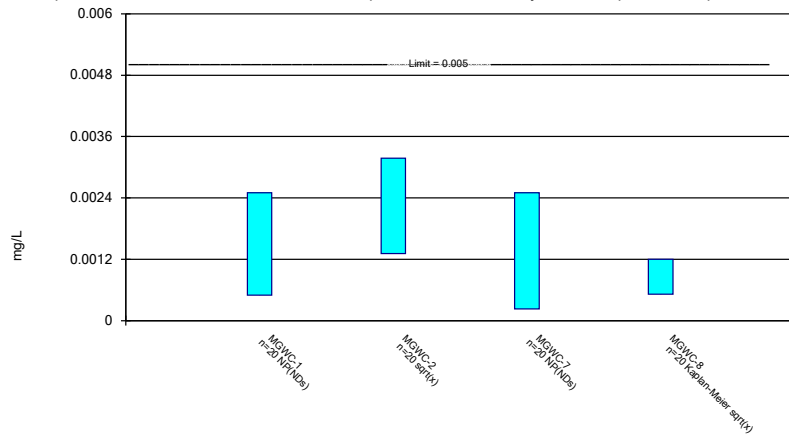
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

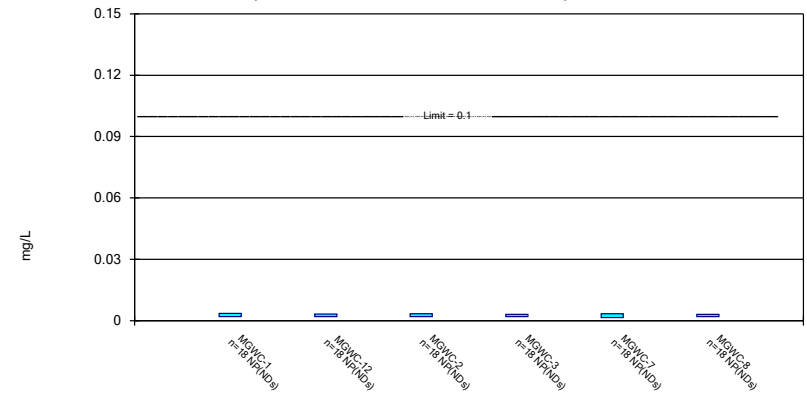
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

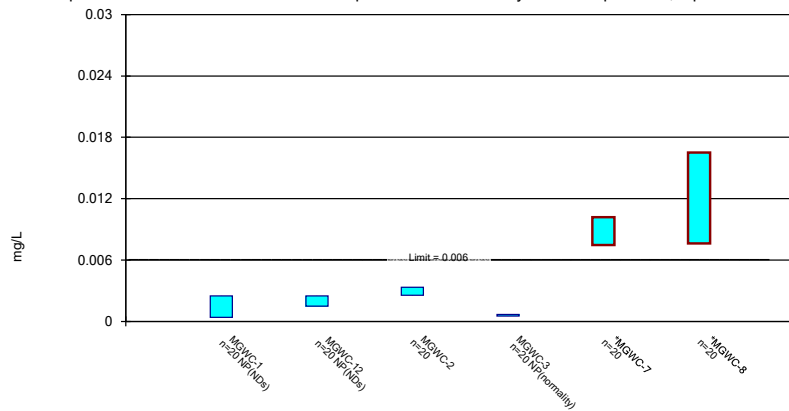
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

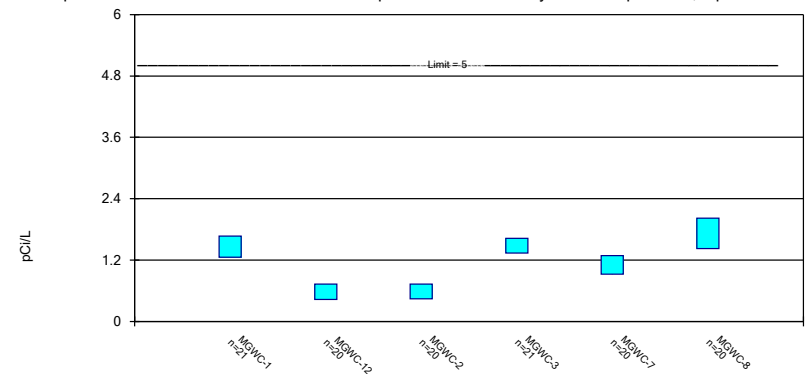
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric Confidence Interval

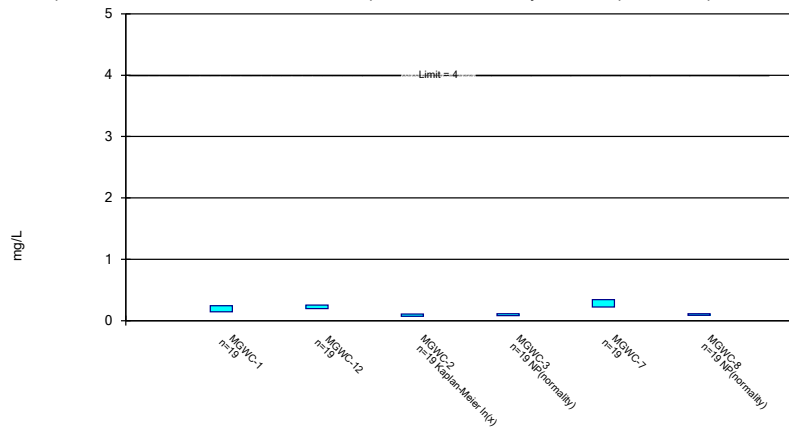
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

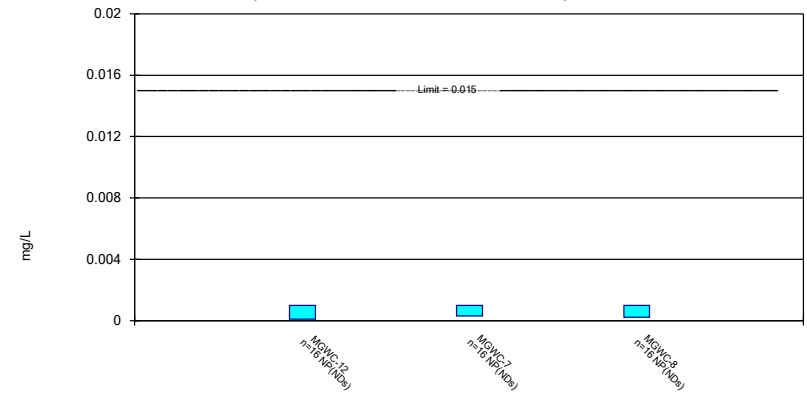
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

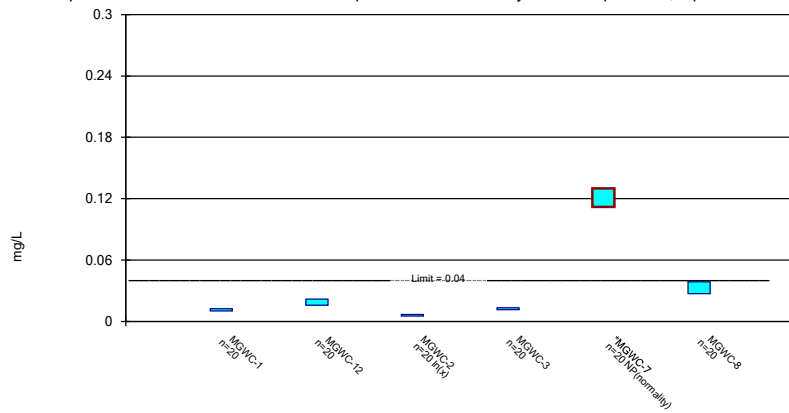
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

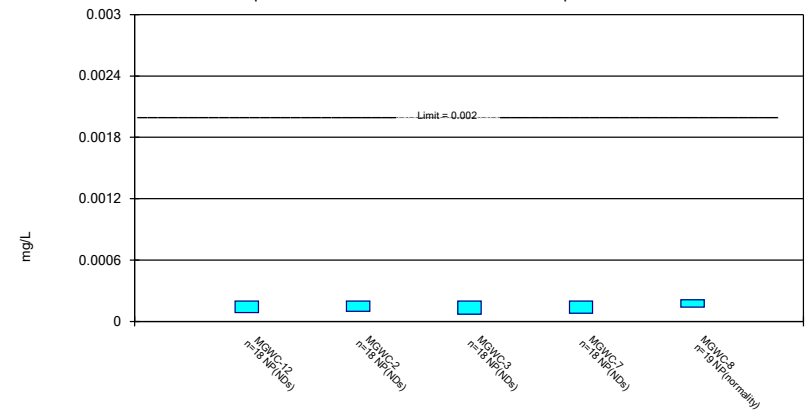
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

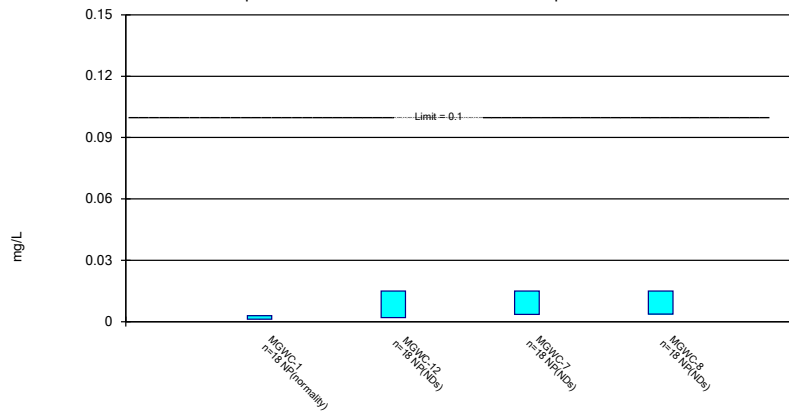


Constituent: Mercury Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Non-Parametric Confidence Interval

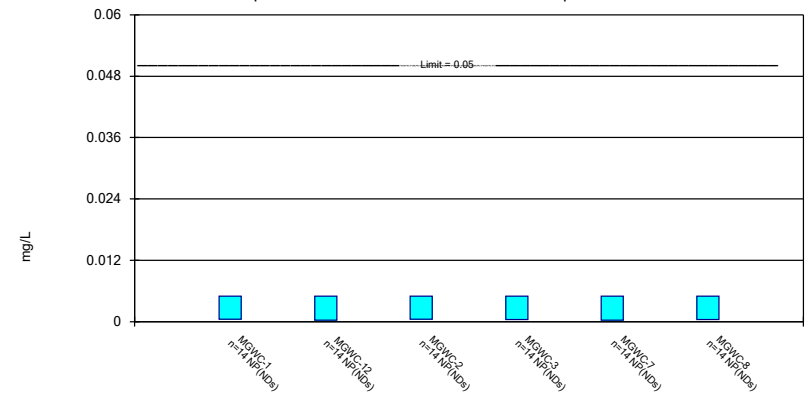
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

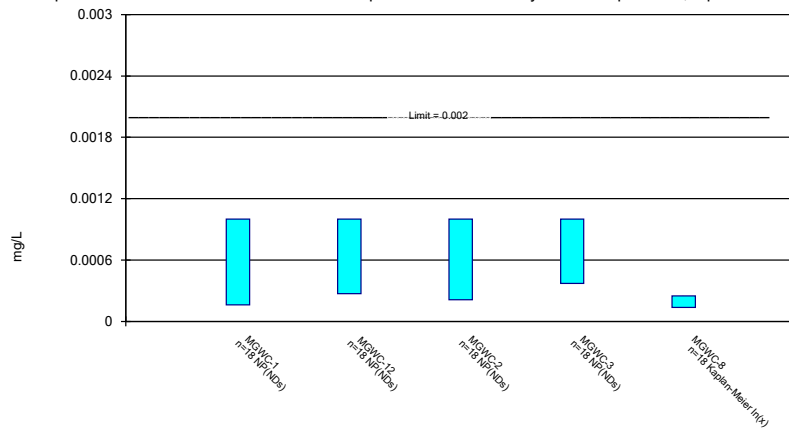
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 6/2/2022 11:54 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-3	MGWC-7
5/5/2016			0.00197 (J)
5/6/2016		<0.002	
6/21/2016	0.0004 (J)	0.0003 (J)	<0.002
8/15/2016			<0.002
8/16/2016	<0.002	<0.002	
9/28/2016			<0.002
9/29/2016	<0.002	<0.002	
11/16/2016	<0.002	<0.002	<0.002
1/17/2017		<0.002	<0.002
1/18/2017	<0.002		
3/2/2017	<0.002	<0.002	<0.002
4/18/2017		<0.002	<0.002
4/25/2017	<0.002		
7/13/2017	<0.002		
3/29/2018	<0.002		<0.002
3/30/2018		<0.002	
1/29/2019	<0.002	<0.002	<0.002
1/28/2020	<0.002		<0.002
1/29/2020		<0.002	
3/10/2020	<0.002	<0.002	<0.002
9/16/2020	<0.002		
9/17/2020		<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002
8/24/2021		<0.002	
8/25/2021	<0.002		<0.002
2/22/2022	<0.002		
2/23/2022		<0.002	<0.002
Mean	0.0019	0.001894	0.001998
Std. Dev.	0.0004	0.000425	7.5E-06
Upper Lim.	0.002	0.002	0.002
Lower Lim.	0.0004	0.0003	0.00197

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.00143 (J)	<0.001
5/6/2016	0.00299 (J)		<0.001	0.00154 (J)		
6/21/2016	0.0047 (J)	0.0015 (J)	<0.001	0.0016 (J)	0.0009 (J)	<0.001
8/15/2016					0.0012 (J)	<0.001
8/16/2016	0.003	0.00082 (J)	<0.001	0.0017		
9/28/2016	0.0036				0.00084 (J)	<0.001
9/29/2016		0.0019	<0.001	0.0013		
11/16/2016	0.003	0.0017	0.00068 (J)	0.0014	<0.001	<0.001
1/17/2017				0.00056 (J)	<0.001	<0.001
1/18/2017		0.00096 (J)	<0.001			
1/19/2017	0.0024					
3/2/2017	0.0027	0.00082 (J)	0.00065 (J)	0.0018	0.0009 (J)	<0.001
4/18/2017	0.0024			0.0018	0.0005 (J)	0.00059 (J)
4/19/2017			<0.001			
4/25/2017		<0.001				
7/13/2017		0.00047 (J)				
3/29/2018	0.0023	0.00053 (J)			0.00066 (J)	
3/30/2018			<0.001	0.0017		<0.001
6/12/2018		0.00063 (J)				
6/13/2018	0.0021		<0.001	0.0015	<0.001	<0.001
10/10/2018	0.0024	0.00098 (J)	<0.001	0.0016	<0.001	<0.001
1/29/2019	0.00255	<0.001	<0.001	0.00143	<0.001	<0.001
3/26/2019	0.002	0.00079 (J)	<0.001	0.0012 (J)	<0.001	<0.001
9/10/2019	0.0018	0.0011	0.00036 (J)	0.0017	0.00074 (J)	0.00056 (J)
1/28/2020		0.00051 (J)			0.00046 (J)	
1/29/2020	0.0021		0.0004 (J)	0.0017		0.00047 (J)
3/10/2020	0.0019	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/2020		<0.001	<0.001			
9/17/2020	0.002			0.0015	0.00045 (J)	<0.001
3/24/2021	0.0024	<0.001	<0.001	0.0018	0.00046 (J)	0.00099 (J)
8/24/2021			<0.001	0.0014		
8/25/2021	0.00092 (J)	<0.001			0.00055 (J)	<0.001
2/22/2022	0.0014	0.00089 (J)				
2/23/2022			<0.001	0.0016	0.0004 (J)	0.00044 (J)
Mean	0.002433	0.00098	0.0009045	0.001492	0.0008245	0.0009025
Std. Dev.	0.0008013	0.0003666	0.0002067	0.0003034	0.0002843	0.0002008
Upper Lim.	0.002888	0.001111	0.001	0.001658	0.0008456	0.001
Lower Lim.	0.001978	0.000611	0.00068	0.001369	0.000518	0.00099

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.039	0.0364
5/6/2016	0.11		0.0605	0.151		
6/21/2016	0.165	0.0439	0.0613	0.174	0.0152	0.0386
8/15/2016					0.015	0.03
8/16/2016	0.094	0.041	0.052	0.13		
9/28/2016	0.1				0.014	0.034
9/29/2016		0.052	0.053	0.14		
11/16/2016	0.096	0.044	0.056	0.14	0.013	0.034
1/17/2017				0.16	0.014	0.038
1/18/2017		0.056	0.06			
1/19/2017	0.12					
3/2/2017	0.097	0.04	0.056	0.15	0.013	0.037
4/18/2017	0.092			0.14	0.011	0.04
4/19/2017			0.051			
4/25/2017		0.042				
7/13/2017		0.043				
3/29/2018	0.095	0.061			0.01	
3/30/2018			0.049	0.13		0.041
6/12/2018		0.063				
6/13/2018	0.096		0.05	0.14	0.0098	0.038
10/10/2018	0.095	0.071	0.046	0.13	0.011	0.035
1/29/2019	0.107	0.06	0.0496	0.138	<0.0025	0.0344
3/26/2019	0.096	0.06	0.048	0.13	0.0086	0.032
9/10/2019	0.11	0.073	0.053	0.15	0.012	0.035
1/28/2020		0.069			0.012	
1/29/2020	0.11		0.051	0.15		0.033
3/10/2020	0.13	0.056	0.049	0.15	0.013	0.036
9/16/2020		0.1	0.048			
9/17/2020	0.11			0.16	0.0091 (J)	0.028
3/24/2021	0.1	0.056	0.049	0.16	0.011	0.054
8/24/2021			0.047	0.16		
8/25/2021	0.11	0.051			0.013	0.031
2/22/2022	0.11	0.067				
2/23/2022			0.046	0.17	0.014	0.036
Mean	0.1072	0.05745	0.05177	0.1477	0.01295	0.03607
Std. Dev.	0.01679	0.01448	0.004721	0.0134	0.006858	0.005348
Upper Lim.	0.11	0.06567	0.05445	0.1553	0.014	0.03885
Lower Lim.	0.096	0.04922	0.04909	0.14	0.01	0.03307

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-3	MGWC-8
5/5/2016			<0.0025
5/6/2016	<0.0025	<0.0025	
6/21/2016	<0.0025	<0.0025	0.0004 (J)
8/15/2016			0.00053 (J)
8/16/2016	<0.0025	<0.0025	
9/28/2016	<0.0025		0.00049 (J)
9/29/2016		<0.0025	
11/16/2016	<0.0025	<0.0025	0.0004 (J)
1/17/2017		<0.0025	0.00084 (J)
1/19/2017	<0.0025		
3/2/2017	<0.0025	<0.0025	0.00068 (J)
4/18/2017	<0.0025	<0.0025	0.00067 (J)
3/29/2018	<0.0025		
3/30/2018		<0.0025	0.0015 (J)
6/13/2018	<0.0025	<0.0025	0.0012 (J)
10/10/2018	<0.0025	<0.0025	0.0016 (J)
1/29/2019	<0.0025	<0.0025	<0.0025
1/29/2020	0.00018 (J)	0.00031 (J)	0.0019
3/10/2020	<0.0025	<0.0025	0.0013 (J)
9/17/2020	<0.0025	<0.0025	0.0019 (J)
3/24/2021	<0.0025	<0.0025	<0.0025
8/24/2021		<0.0025	
8/25/2021	<0.0025		0.0015 (J)
2/22/2022	<0.0025		
2/23/2022		<0.0025	0.0014 (J)
Mean	0.002371	0.002378	0.001323
Std. Dev.	0.0005468	0.0005162	0.0007309
Upper Lim.	0.0025	0.0025	0.001266
Lower Lim.	0.00018	0.00031	0.0006815

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-2	MGWC-7	MGWC-8
5/5/2016			<0.0025	0.000784 (J)
5/6/2016	0.000126 (J)	0.00166		
6/21/2016	0.0005 (J)	0.0008 (J)	<0.0025	0.0003 (J)
8/15/2016			<0.0025	<0.0025
8/16/2016	<0.0025	0.0034		
9/28/2016	<0.0025		<0.0025	<0.0025
9/29/2016		0.0027		
11/16/2016	<0.0025	0.0022 (J)	<0.0025	<0.0025
1/17/2017			<0.0025	<0.0025
1/18/2017		0.008		
1/19/2017	<0.0025			
3/2/2017	<0.0025	0.005	<0.0025	<0.0025
4/18/2017	<0.0025		<0.0025	0.00044 (J)
4/19/2017		0.0011 (J)		
3/29/2018	<0.0025		<0.0025	
3/30/2018		0.0016 (J)		0.00058 (J)
6/13/2018	<0.0025	0.0016 (J)	<0.0025	0.00076 (J)
10/10/2018	<0.0025	0.001 (J)	<0.0025	0.00035 (J)
1/29/2019	<0.0025	0.00315	<0.0025	<0.0025
3/26/2019	<0.0025	0.0019 (J)	<0.0025	0.0005 (J)
9/10/2019	0.00017 (J)	0.0011	<0.0025	0.00079 (J)
1/28/2020			<0.0025	
1/29/2020	<0.0025	0.0054		0.0009 (J)
3/10/2020	<0.0025	0.0011 (J)	<0.0025	0.0011 (J)
9/16/2020		0.00053 (J)		
9/17/2020	<0.0025		0.00023 (J)	0.00072 (J)
3/24/2021	<0.0025	0.0022 (J)	<0.0025	0.001 (J)
8/24/2021		0.00054 (J)		
8/25/2021	<0.0025		<0.0025	0.0046
2/22/2022	<0.0025			
2/23/2022		0.0039	<0.0025	0.0014 (J)
Mean	0.002165	0.002444	0.002386	0.001461
Std. Dev.	0.0008213	0.001915	0.0005076	0.00113
Upper Lim.	0.0025	0.00318	0.0025	0.001201
Lower Lim.	0.0005	0.001313	0.00023	0.0005164

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					<0.002	<0.002
5/6/2016	<0.002		<0.002	<0.002		
6/21/2016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/15/2016					<0.002	<0.002
8/16/2016	<0.002	<0.002	<0.002	<0.002		
9/28/2016	<0.002				<0.002	<0.002
9/29/2016		<0.002	<0.002	<0.002		
11/16/2016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/17/2017				<0.002	<0.002	<0.002
1/18/2017		<0.002	<0.002			
1/19/2017	<0.002					
3/2/2017	0.0036	0.0032	0.0033	0.003	0.0034	0.0031
4/18/2017	<0.002			<0.002	<0.002	<0.002
4/19/2017			<0.002			
4/25/2017		<0.002				
7/13/2017		<0.002				
3/29/2018	<0.002	<0.002			<0.002	
3/30/2018			<0.002	<0.002		<0.002
6/12/2018		<0.002				
6/13/2018	<0.002		<0.002	<0.002	<0.002	<0.002
10/10/2018	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/29/2019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/28/2020		<0.002			0.0015 (J)	
1/29/2020	<0.002		<0.002	<0.002		<0.002
3/10/2020	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
9/16/2020		0.029	<0.002			
9/17/2020	<0.002			<0.002	<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/24/2021			<0.002	<0.002		
8/25/2021	<0.002	<0.002			<0.002	<0.002
2/22/2022	<0.002	<0.002				
2/23/2022			<0.002	<0.002	<0.002	<0.002
Mean	0.002089	0.003567	0.002072	0.002056	0.00205	0.002061
Std. Dev.	0.0003771	0.006354	0.0003064	0.0002357	0.0003569	0.0002593
Upper Lim.	0.0036	0.0032	0.0033	0.003	0.0034	0.0031
Lower Lim.	0.002	0.002	0.002	0.002	0.0015	0.002

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.0036 (J)	0.00359 (J)
5/6/2016	<0.0025		0.00311 (J)	<0.0025		
6/21/2016	0.0012 (J)	<0.0025	0.0031 (J)	0.0006 (J)	0.0097 (J)	0.0033 (J)
8/15/2016					0.0098	0.0038
8/16/2016	0.00047 (J)	<0.0025	0.0034	0.00064 (J)		
9/28/2016	0.00058 (J)				0.0095	0.0043
9/29/2016		<0.0025	0.0032	0.00054 (J)		
11/16/2016	<0.0025	<0.0025	0.0032	0.00041 (J)	0.0094	0.004
1/17/2017				0.00051 (J)	0.0099	0.0051
1/18/2017		<0.0025	0.0032			
1/19/2017	0.0004 (J)					
3/2/2017	<0.0025	<0.0025	0.0042	0.00064 (J)	0.013	0.0064
4/18/2017	<0.0025			0.00057 (J)	0.0086	0.005
4/19/2017			0.0035			
4/25/2017		<0.0025				
7/13/2017		<0.0025				
3/29/2018	<0.0025	<0.0025			0.0088	
3/30/2018			0.0037	0.00068 (J)		0.015
6/12/2018		<0.0025				
6/13/2018	<0.0025		0.0035	0.00048 (J)	0.0093	0.014
10/10/2018	<0.0025	<0.0025	0.0034	0.00063 (J)	0.012	0.018
1/29/2019	<0.0025	<0.0025	0.00293	<0.0025	0.0103	0.0159
3/26/2019	<0.0025	<0.0025	0.003	<0.0025	0.009	0.02
9/10/2019	0.00032 (J)	0.00016 (J)	0.0027	0.00065	0.011	0.019
1/28/2020		<0.0025			0.008	
1/29/2020	0.00027 (J)		0.003	0.00067		0.025
3/10/2020	<0.0025	<0.0025	0.0024 (J)	0.0005 (J)	0.0081	0.017
9/16/2020		0.0015 (J)	0.002 (J)			
9/17/2020	0.0002 (J)			0.00053 (J)	0.0098	0.024
3/24/2021	<0.0025	<0.0025	0.0019 (J)	0.00053 (J)	0.0063	0.002 (J)
8/24/2021			0.0018 (J)	0.00034 (J)		
8/25/2021	0.00018 (J)	<0.0025			0.0032	0.021
2/22/2022	<0.0025	<0.0025				
2/23/2022			0.0016 (J)	0.0012 (J)	0.007	0.015
Mean	0.001681	0.002333	0.002942	0.000881	0.008815	0.01207
Std. Dev.	0.001049	0.0005581	0.000684	0.0007174	0.002397	0.007847
Upper Lim.	0.0025	0.0025	0.00333	0.00068	0.01018	0.01653
Lower Lim.	0.0004	0.0015	0.002554	0.00051	0.007454	0.007613



# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.75	1.21
5/6/2016	1.07		0.633	1.41		
6/21/2016	2.01	0.292 (U)	1.19 (U)	1.71	1.01	0.895 (U)
8/15/2016					1.3	1.64
8/16/2016	1.12	0.232 (U)	0.516	1.75		
9/28/2016	1.09				1.06	2.17
9/29/2016		1.11	0.665	1.43		
11/16/2016	1.58	0.798	0.694	1.9	0.855	1.49
1/17/2017				1.9	1.59	1.75
1/18/2017		0.302 (U)	0.688			
1/19/2017	1.64					
3/2/2017	1.08	0.437	0.484	1.37	1.4	1.03
4/18/2017	1.23			1.42	0.684	1.83
4/19/2017			0.599			
4/25/2017		0.391				
7/13/2017		0.47				
3/29/2018	1.21	0.736			0.822	
3/30/2018			0.677	1.43		2.15
6/12/2018		0.438				
6/13/2018	1.09		0.272 (U)	1.27	0.716	1.51
10/10/2018	1.95	0.371	0.336	1.54	1.51	2.72
1/29/2019	1.11	0.639	0.719	1.34	1.7	1.93
3/26/2019	1	0.607	0.41 (U)	1.25	0.784	1.79
9/10/2019	1.26	0.939	0.548	1.6	0.958	1.78
1/28/2020		0.465			1.38	
1/29/2020	1.39		0.0985 (U)	1.44		1.61
3/10/2020	1.4	0.34 (U)	0.589	1.32	0.903	1.95
9/16/2020		1.09	1.11			
9/17/2020	1.79			0.666 (U)	1.28	1.56
12/8/2020	1.87			1.65		
3/24/2021	1.81	0.434 (U)	0.625	1.58	1.2	0.636
8/24/2021			0.313 (U)	1.65		
8/25/2021	2.12	0.563			0.767	2.13
2/22/2022	1.85	0.888				
2/23/2022			0.598	1.47	1.42	2.62
Mean	1.46	0.5771	0.5882	1.481	1.104	1.72
Std. Dev.	0.3715	0.2662	0.2533	0.2642	0.3229	0.524
Upper Lim.	1.665	0.7283	0.732	1.627	1.288	2.018
Lower Lim.	1.256	0.4259	0.4444	1.335	0.9211	1.422

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.394	0.103 (J)
5/6/2016	0.28 (J)		0.088 (J)	0.086 (J)		
6/21/2016	0.36	0.14 (J)	0.19 (J)	0.23 (J)	0.49	0.1 (J)
8/15/2016					0.44	0.11 (J)
8/16/2016	0.27	0.29	0.087 (J)	<0.2		
9/28/2016	0.26				0.4	0.1 (J)
9/29/2016		0.26	<0.2	0.082 (J)		
11/16/2016	0.24	0.25	<0.2	0.087 (J)	0.36	0.091 (J)
1/17/2017				0.086 (J)	0.2	<0.2
1/18/2017		0.26	<0.2			
1/19/2017	0.22					
3/2/2017	0.27	0.28	0.15 (J)	0.15 (J)	0.36	0.16 (J)
4/18/2017	0.2			<0.2	0.29	<0.2
4/19/2017			<0.2			
4/25/2017		0.25				
7/13/2017		0.21				
10/10/2017	0.18 (J)	0.22	<0.2	<0.2	0.28	<0.2
3/29/2018	0.16 (J)	0.23			0.23	
3/30/2018			<0.2	<0.2		0.088 (J)
6/12/2018		0.23				
6/13/2018	0.14 (J)		<0.2	<0.2	0.2	0.15 (J)
10/10/2018	0.17 (J)	0.25	0.085 (J)	<0.2	0.23	0.11 (J)
3/26/2019	0.16	0.22	0.076 (J)	0.072 (J)	0.19 (J)	0.088 (J)
9/10/2019	0.098 (J)	0.2	0.07 (J)	0.073 (J)	0.15	0.083 (J)
3/10/2020	0.086 (J)	0.15	0.05 (J)	0.058 (J)	0.18	0.084 (J)
9/16/2020		0.26	0.076 (J)			
9/17/2020	0.15			0.083 (J)	0.25	0.11
3/24/2021	0.27	0.27	0.11	0.092 (J)	0.35	0.11
8/24/2021			0.095 (J)	0.11		
8/25/2021	0.097 (J)	0.19			0.15	0.038 (J)
2/22/2022	0.047 (J)	0.093 (J)				
2/23/2022			0.075 (J)	0.086 (J)	0.22	0.05 (J)
Mean	0.1925	0.2238	0.09747	0.09974	0.2823	0.09868
Std. Dev.	0.0814	0.05123	0.03011	0.03667	0.1025	0.02762
Upper Lim.	0.2402	0.2538	0.1094	0.11	0.3423	0.11
Lower Lim.	0.1449	0.1938	0.07245	0.082	0.2223	0.084

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-7	MGWC-8
5/5/2016		<0.001	<0.001
6/21/2016	0.0001 (J)	0.0003 (J)	<0.001
8/15/2016		<0.001	<0.001
8/16/2016	<0.001		
9/28/2016		<0.001	<0.001
9/29/2016	<0.001		
11/16/2016	<0.001	<0.001	<0.001
1/17/2017		<0.001	<0.001
1/18/2017	<0.001		
3/2/2017	<0.001	<0.001	<0.001
4/18/2017		<0.001	<0.001
4/25/2017	<0.001		
7/13/2017	<0.001		
3/29/2018	<0.001	<0.001	
3/30/2018			<0.001
1/29/2019	<0.001	<0.001	<0.001
1/28/2020	<0.001	<0.001	
1/29/2020			<0.001
3/10/2020	<0.001	<0.001	<0.001
9/16/2020	<0.001		
9/17/2020		<0.001	<0.001
3/24/2021	<0.001	<0.001	<0.001
8/25/2021	<0.001	0.00019 (J)	0.00022 (J)
2/22/2022	<0.001		
2/23/2022		<0.001	<0.001
Mean	0.0009438	0.0009056	0.0009513
Std. Dev.	0.000225	0.0002587	0.000195
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	0.0003	0.00022

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.0586	0.0252 (J)
5/6/2016	0.0128 (J)		<0.025	0.0113 (J)		
6/21/2016	0.0102 (J)	0.0112 (J)	0.0047 (J)	0.0103 (J)	0.122	0.0228 (J)
8/15/2016					0.12	0.026
8/16/2016	0.012	0.014	0.0043 (J)	0.01		
9/28/2016	0.012				0.12	0.026
9/29/2016		0.017	0.0048 (J)	0.01		
11/16/2016	0.013	0.016	0.0058	0.014	0.13	0.031
1/17/2017				0.014	0.14	0.032
1/18/2017		0.015	0.0051			
1/19/2017	0.011					
3/2/2017	0.013	0.015	0.0061	0.013	0.13	0.031
4/18/2017	0.0097			0.01	0.11	0.023
4/19/2017			0.0042 (J)			
4/25/2017		0.013				
7/13/2017		0.014				
3/29/2018	0.017 (J)	0.032 (J)			0.17 (J)	
3/30/2018			0.008 (J)	0.017 (J)		0.058 (J)
6/12/2018		0.019				
6/13/2018	0.0094		0.0054	0.011	0.12	0.035
10/10/2018	0.011	0.027	0.0055	0.013	0.13	0.046
1/29/2019	0.0109	0.0172	0.00537	0.0106	0.112	0.0361
3/26/2019	0.01	0.02	0.0051	0.012	0.12	0.043
9/10/2019	0.012	0.023	0.0074	0.015	0.11	0.042
1/28/2020		0.022			0.13	
1/29/2020	0.0096		0.0059	0.012		0.037
3/10/2020	<0.025	0.018	0.0068	0.014	0.11	0.028
9/16/2020		0.025	0.0055			
9/17/2020	0.0086			0.012	0.11	0.039
3/24/2021	0.013	0.018	0.0066	0.013	0.13	0.011
8/24/2021			0.0062	0.012		
8/25/2021	0.0096	0.017			0.12	0.037
2/22/2022	0.01	0.022				
2/23/2022			0.0066	0.013	0.13	0.028
Mean	0.01137	0.01877	0.006094	0.01236	0.1211	0.03286
Std. Dev.	0.001925	0.00515	0.001801	0.00186	0.02015	0.01016
Upper Lim.	0.01246	0.02169	0.006782	0.01342	0.13	0.03863
Lower Lim.	0.01027	0.01585	0.005138	0.0113	0.112	0.02708

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0002	<0.0002
5/6/2016		<0.0002	<0.0002		
6/21/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/15/2016				<0.0002	0.00015 (J)
8/16/2016	<0.0002	7.8E-05 (J)	<0.0002		
9/28/2016				<0.0002	<0.0002
9/29/2016	<0.0002	<0.0002	<0.0002		
11/16/2016	8.6E-05 (J)	0.0001 (J)	7E-05 (J)	8E-05 (J)	0.00021
1/17/2017			<0.0002	<0.0002	7.6E-05 (J)
1/18/2017	<0.0002	<0.0002			
3/2/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4/18/2017			<0.0002	<0.0002	0.00018 (J)
4/19/2017		<0.0002			
4/25/2017	<0.0002				
7/13/2017	<0.0002				
3/29/2018	7.4E-05 (J)			<0.0002	
3/30/2018		<0.0002	<0.0002		0.00013 (J)
6/12/2018	<0.0002				
6/13/2018		<0.0002	<0.0002	<0.0002	0.00074
10/10/2018	<0.0002	<0.0002	<0.0002	<0.0002	0.00013 (J)
1/29/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/28/2020	<0.0002			<0.0002	
1/29/2020		<0.0002	<0.0002		0.00012 (J)
3/10/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002	<0.0002			
9/17/2020			<0.0002	<0.0002	0.00014 (J)
3/24/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/24/2021		<0.0002	<0.0002		
8/25/2021	<0.0002			<0.0002	0.0041
10/26/2021					<0.0002
2/22/2022	<0.0002				
2/23/2022		<0.0002	<0.0002	<0.0002	0.00028
Mean	0.0001867	0.0001877	0.0001928	0.0001933	0.0004135
Std. Dev.	3.886E-05	3.609E-05	3.064E-05	2.828E-05	0.0009031
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.00021
Lower Lim.	8.6E-05	0.0001	7E-05	8E-05	0.00014

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-7	MGWC-8
5/5/2016			0.00351 (J)	<0.015
5/6/2016	0.0021 (J)			
6/21/2016	0.002 (J)	0.002 (J)	<0.015	<0.015
8/15/2016			<0.015	<0.015
8/16/2016	0.0019 (J)	0.0012 (J)		
9/28/2016	0.0018 (J)		<0.015	<0.015
9/29/2016		0.0014 (J)		
11/16/2016	<0.015	<0.015	<0.015	<0.015
1/17/2017			<0.015	<0.015
1/18/2017		<0.015		
1/19/2017	0.0011 (J)			
3/2/2017	0.0012 (J)	<0.015	<0.015	<0.015
4/18/2017	0.0013 (J)		<0.015	0.0037 (J)
4/25/2017		<0.015		
7/13/2017		<0.015		
3/29/2018	0.0017 (J)	<0.015	<0.015	
3/30/2018				<0.015
6/12/2018		<0.015		
6/13/2018	0.00087 (J)		<0.015	<0.015
10/10/2018	<0.015	<0.015	<0.015	<0.015
1/29/2019	<0.015	<0.015	<0.015	<0.015
1/28/2020		<0.015	<0.015	
1/29/2020	0.0015 (J)			<0.015
3/10/2020	<0.015	<0.015	<0.015	<0.015
9/16/2020		0.0024 (J)		
9/17/2020	0.0012 (J)		<0.015	<0.015
3/24/2021	0.0029 (J)	<0.015	<0.015	<0.015
8/25/2021	0.00088 (J)	<0.015	<0.015	<0.015
2/22/2022	0.0014 (J)	0.00064 (J)		
2/23/2022			<0.015	<0.015
Mean	0.004547	0.01126	0.01436	0.01437
Std. Dev.	0.00577	0.006218	0.002708	0.002663
Upper Lim.	0.0029	0.015	0.015	0.015
Lower Lim.	0.0012	0.002	0.00351	0.0037

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					<0.005	<0.005
5/6/2016	<0.005		<0.005	<0.005		
6/21/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/15/2016					<0.005	0.00033 (J)
8/16/2016	<0.005	<0.005	<0.005	<0.005		
9/28/2016	<0.005				<0.005	0.00038 (J)
9/29/2016		<0.005	<0.005	<0.005		
11/16/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/17/2017				<0.005	<0.005	<0.005
1/18/2017		<0.005	<0.005			
1/19/2017	<0.005					
3/2/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/18/2017	<0.005			<0.005	<0.005	0.0024
4/19/2017			<0.005			
4/25/2017		<0.005				
7/13/2017		<0.005				
3/29/2018	0.0005 (J)	0.00027 (J)			0.00026 (J)	
3/30/2018			0.00045 (J)	0.00044 (J)		0.00027 (J)
6/12/2018		<0.005				
6/13/2018	<0.005		<0.005	<0.005	<0.005	<0.005
10/10/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/29/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/28/2020		<0.005			<0.005	
1/29/2020	<0.005		<0.005	<0.005		<0.005
2/22/2022	<0.005	<0.005				
2/23/2022			<0.005	<0.005	<0.005	<0.005
Mean	0.004679	0.004662	0.004675	0.004674	0.004661	0.003813
Std. Dev.	0.001203	0.001264	0.001216	0.001219	0.001267	0.002011
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0005	0.00027	0.00045	0.00044	0.00026	0.00038

# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 6/2/2022 11:56 AM View: Appendix IV

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-8
5/5/2016					<0.001
5/6/2016	<0.001		<0.001	<0.001	
6/21/2016	9E-05 (J)	<0.001	<0.001	<0.001	0.0001 (J)
8/15/2016					0.00016 (J)
8/16/2016	<0.001	<0.001	<0.001	<0.001	
9/28/2016	<0.001				0.00014 (J)
9/29/2016		<0.001	<0.001	<0.001	
11/16/2016	<0.001	<0.001	<0.001	<0.001	9E-05 (J)
1/17/2017				<0.001	0.00016 (J)
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				
3/2/2017	<0.001	<0.001	<0.001	<0.001	0.00018 (J)
4/18/2017	9.5E-05 (J)			<0.001	0.00019 (J)
4/19/2017			<0.001		
4/25/2017		<0.001			
7/13/2017		<0.001			
3/29/2018	0.00014 (J)	<0.001			
3/30/2018			<0.001	<0.001	0.00027 (J)
6/12/2018		<0.001			
6/13/2018	<0.001		<0.001	<0.001	0.00027 (J)
10/10/2018	<0.001	<0.001	<0.001	<0.001	0.00025 (J)
1/29/2019	<0.001	<0.001	<0.001	<0.001	<0.001
1/28/2020		<0.001			
1/29/2020	0.00032 (J)		0.00021 (J)	0.00037 (J)	0.00042 (J)
3/10/2020	<0.001	0.00015 (J)	<0.001	0.00016 (J)	0.00025 (J)
9/16/2020		0.00027 (J)	<0.001		
9/17/2020	0.00016 (J)			<0.001	0.00031 (J)
3/24/2021	<0.001	<0.001	<0.001	<0.001	<0.001
8/24/2021			<0.001	<0.001	
8/25/2021	<0.001	<0.001			0.0004 (J)
2/22/2022	<0.001	<0.001			
2/23/2022			<0.001	<0.001	<0.001
Mean	0.0007669	0.0009122	0.0009561	0.0009183	0.0003994
Std. Dev.	0.0003893	0.0002563	0.0001862	0.0002404	0.000342
Upper Lim.	0.001	0.001	0.001	0.001	0.0002481
Lower Lim.	0.00016	0.00027	0.00021	0.00037	0.000136



FIGURE I.

# Appendix IV Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 5:06 PM

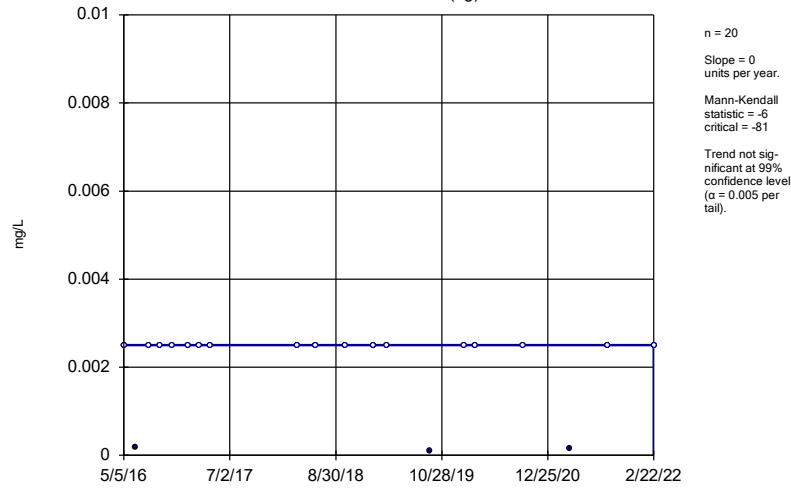
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-8	0.003692	111	81	Yes	20	0	n/a	n/a	0.01	NP

# Appendix IV Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 5/23/2022, 5:06 PM

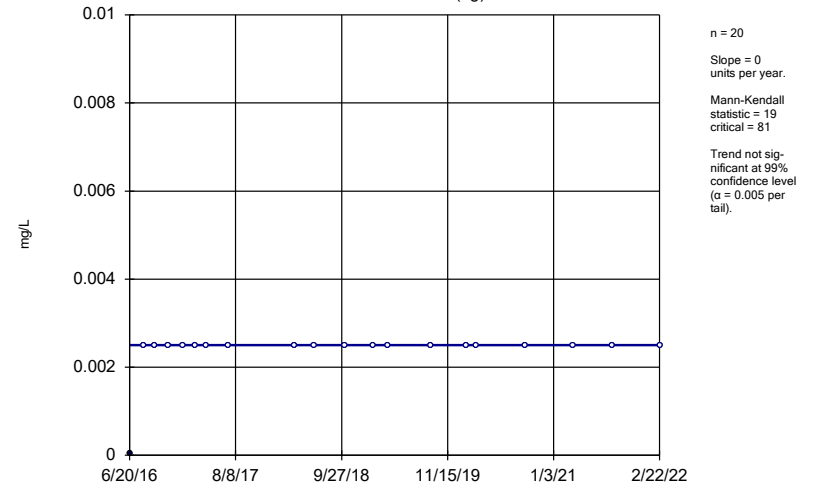
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	MGWA-10 (bg)	0	-6	-81	No	20	85	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	19	81	No	20	95	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	17	81	No	20	95	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	4	81	No	20	45	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6A (bg)	0.00005762	3	25	No	9	22.22	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-7	-0.0004386	-47	-81	No	20	0	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.003692</b>	<b>111</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Lithium (mg/L)	MGWA-10 (bg)	0.00007562	17	81	No	20	5	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0007894	27	81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0003923	43	81	No	20	5	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6 (bg)	0	7	81	No	20	95	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.0009798	-24	-25	No	9	55.56	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWC-7	0	-1	-81	No	20	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator MGWA-10 (bg)



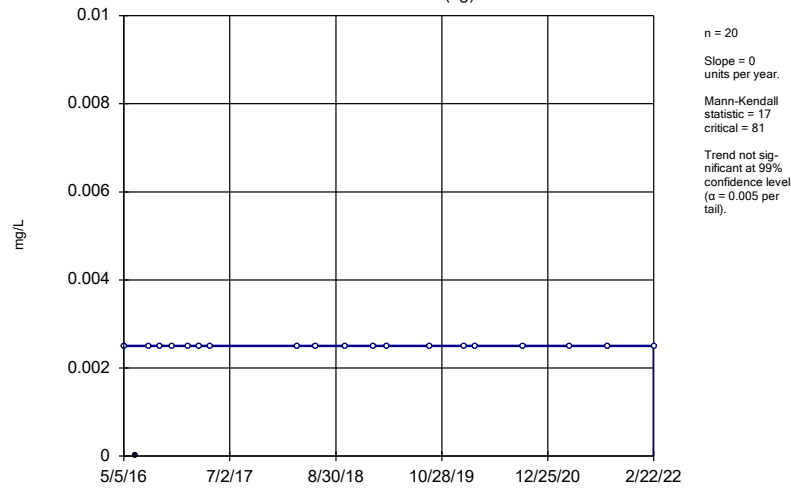
Constituent: Cobalt Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-11 (bg)



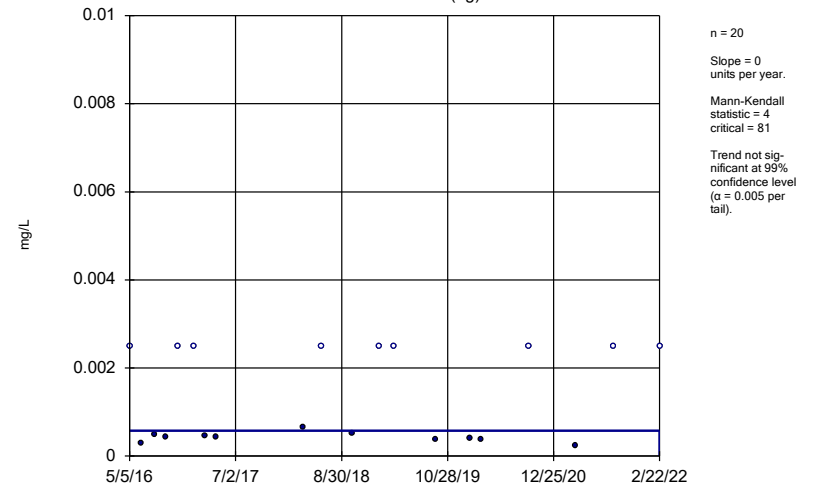
Constituent: Cobalt Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-5 (bg)



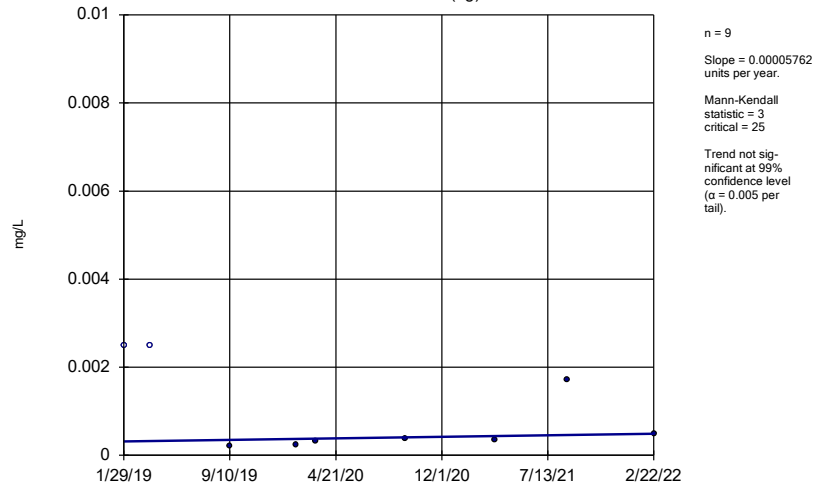
Constituent: Cobalt Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-6 (bg)



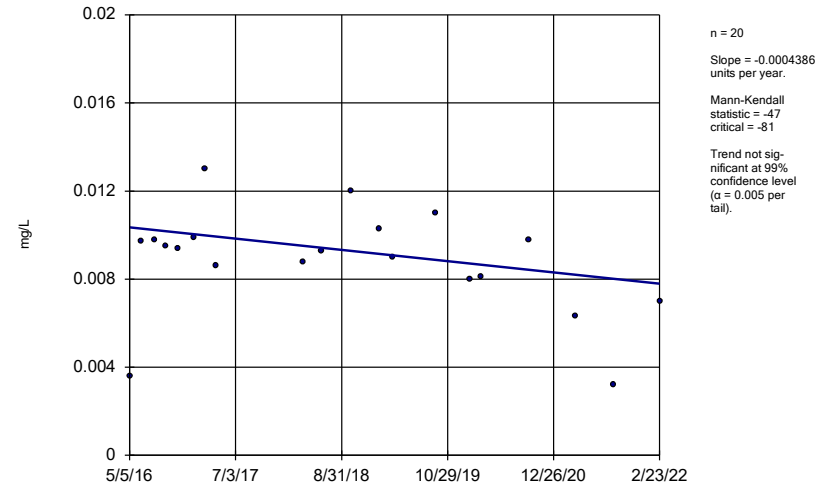
Constituent: Cobalt Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-6A (bg)



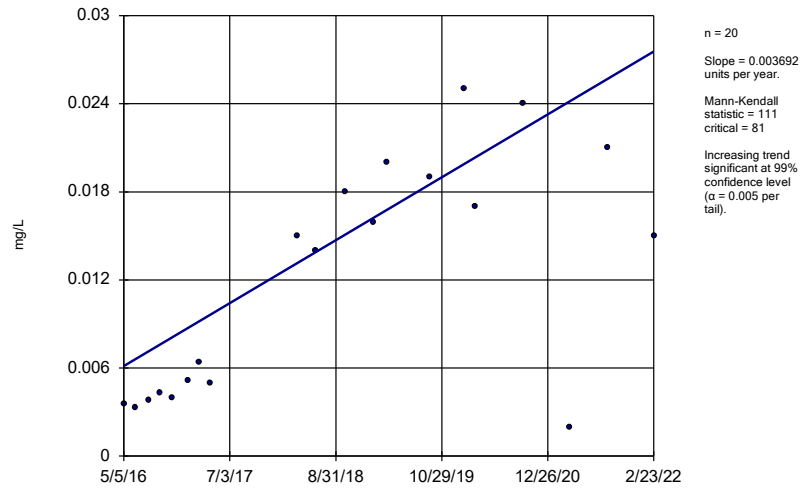
Constituent: Cobalt Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-7



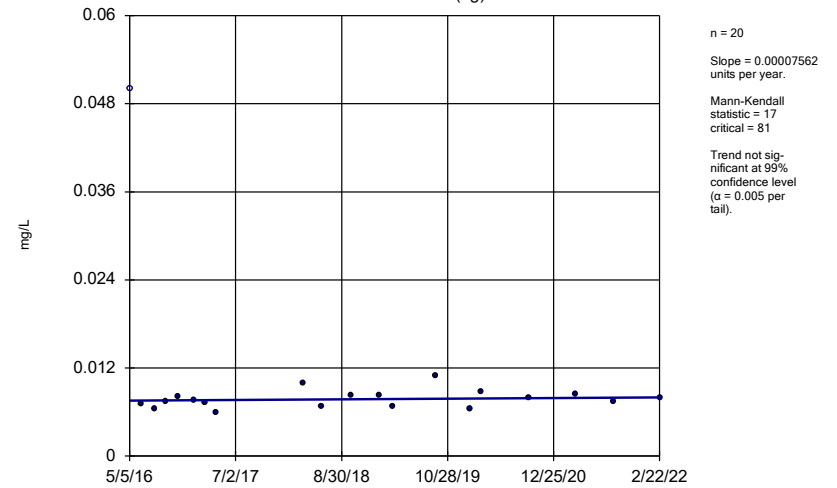
Constituent: Cobalt Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-8



Constituent: Cobalt Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-10 (bg)

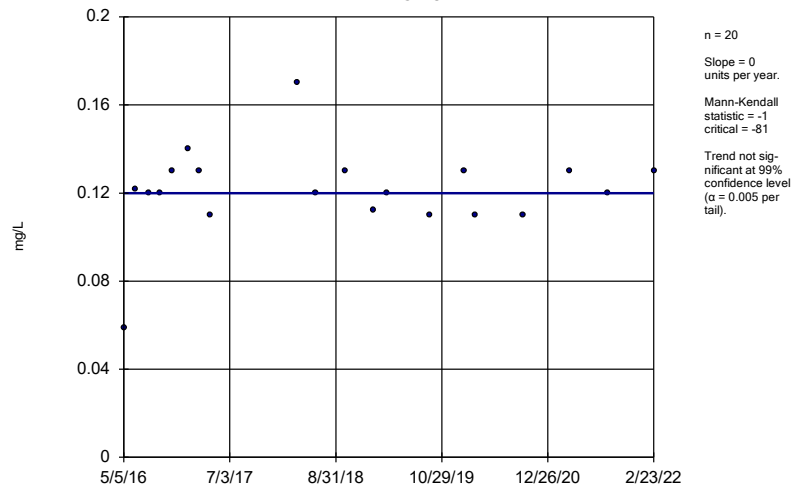


Constituent: Lithium Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

MGWC-7



Constituent: Lithium Analysis Run 5/23/2022 5:05 PM View: Appendix IV - Trend Tests  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

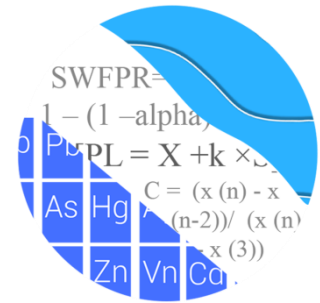
## APPENDIX B

---

*Statistical Analysis Report  
August 2022 Monitoring Event*



# GROUNDWATER STATS CONSULTING



January 31, 2023

Southern Company Services  
Attn: Ms. Lauren Hartley  
241 Ralph McGill Blvd NE, Bin 10160  
Atlanta, Georgia 30308

Re: Plant McIntosh Ash Pond 1 (AP-1)  
Statistical Analysis August 2022

Dear Ms. Hartley,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2022 Semi-Annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant McIntosh AP-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III and IV parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Sampling is conducted on a semi-annual basis for all constituents. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** MGWA-5, MGWA-6, MGWA-6A, MGWA-10, and MGWA-11
- **Downgradient wells:** MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8, and MGWC-12

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The Coal Combustion Residuals (CCR) program consists of the following constituents:

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228 fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided with the previous screening and demonstrated that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

The original background screening was conducted in 2017 by MacStat Consulting. Values identified as outliers were flagged in the database and excluded prior to construction of statistical limits. Both intrawell and interwell prediction limits, combined with a 1-of-2 resample plan, were originally recommended. The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach.

Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

### **Summary of Statistical Methods – Appendix III Parameters**

Based on the earlier evaluation described above, the following method was selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. While this was not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

### **Statistical Analysis of Appendix III Parameters – August 2022**

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. When values in background have been flagged as outliers, they may be seen in a lighter font and as a disconnected symbol on the graphs. During this analysis the most recent measurement of cobalt in upgradient well MGWA-5 was flagged as an outlier in order to construct interwell tolerance limits that are conservative (i.e., lower) from a regulatory perspective. This measurement will be re-evaluated during the next sample event. A summary of flagged values follows this report (Figure C).

#### Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through August 2022 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August 2022 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no exceedance is noted and no further action is necessary.

If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter and includes a list of exceedances. Exceedances were identified for the following well/constituent pairs:

- Boron: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8
- Chloride: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8
- Fluoride: MGWC-7
- Sulfate: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8
- TDS: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8

### Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

#### Increasing

- Boron: MGWC-1, MGWC-7, and MGWC-8
- Chloride: MGWC-8
- Sulfate: MGWC-3 and MGWC-8
- TDS: MGWC-8

#### Decreasing

- Boron: MGWA-6 (upgradient) and MGWC-2
- Chloride: MGWA-5 (upgradient), MGWA-6 (upgradient), MGWA-6A (upgradient), MGWC-2, and MGWC-7
- Fluoride: MGWC-7
- Sulfate: MGWA-5 (upgradient), MGWA-6 (upgradient), MGW-10 (upgradient), and MGWC-2
- TDS: MGWC-2

## **Statistical Methods – Appendix IV Parameters**

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits) or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. Confidence intervals are provided for Appendix IV well/constituent pairs with detections and with current reported data. The methods are described below.

### **Statistical Analysis of Appendix IV Parameters – August 2022**

For Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that contain 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis.

During previous analyses, high concentrations from May 2016 through April 2017 for arsenic at upgradient well MGWA-6 were deselected prior to calculating an interwell upper tolerance limit. These historical measurements were considerably higher than more recent measurements; and this step results in a more conservative (i.e., lower) statistical limit from a regulatory perspective. All background data will be re-evaluated for upgradient wells during the next analysis. A summary of these background data ranges follows this letter. No new values were flagged as outliers and a summary of previously flagged outliers follows this report (Figure C).

#### Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for combined radium. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

## Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure G).

## Confidence Intervals

To complete the statistical comparison of downgradient well data to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient and delineation well using all available data through August 2022.

The Sanitas software was used to calculate both the tolerance limits and the confidence intervals. Confidence intervals were compared to the GWPS prepared as described above (Figure H). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. A summary of the confidence intervals follows this letter and no exceedances were identified.

Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified.

Summaries of the confidence intervals follow this letter and exceedances were identified for the following well/constituent pairs:

- Cobalt: MGWC-7 and MGWC-8
- Lithium: MGWC-7

#### Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure I). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Cobalt: MGWC-8

Decreasing:

- None

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant McIntosh AP-1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Abdul Diane  
Groundwater Analyst



Kristina L. Rayner  
Senior Statistician



# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 11/10/2022 3:04 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

Antimony (mg/L)  
MGWA-6A

Beryllium (mg/L)  
MGWA-5, MGWA-6, MGWA-6A

Cadmium (mg/L)  
MGWA-11, MGWA-5, MGWA-6, MGWA-6A

Chromium (mg/L)  
MGWA-6A

Lead (mg/L)  
MGWA-6, MGWA-6A

Mercury (mg/L)  
MGWA-10, MGWA-5, MGWA-6A

Molybdenum (mg/L)  
MGWA-6

Selenium (mg/L)  
MGWA-5, MGWA-6, MGWA-6A

Thallium (mg/L)  
MGWA-6A

# Date Ranges

Date: 11/10/2022 1:41 AM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

Arsenic (mg/L)

MGWA-6 overall:3/29/2018-8/4/2022

# Interwell Prediction Limits - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	8/3/2022	1.7	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	8/4/2022	1.9	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	8/3/2022	0.76	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	8/3/2022	2.3	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	8/4/2022	4.3	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Chloride (mg/L)	MGWC-1	9.419	n/a	8/3/2022	13	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.419	n/a	8/4/2022	12	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.419	n/a	8/3/2022	13	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.419	n/a	8/3/2022	11	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.419	n/a	8/4/2022	13	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	8/3/2022	0.2	Yes	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	18.98	n/a	8/3/2022	140	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	18.98	n/a	8/4/2022	150	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	18.98	n/a	8/3/2022	130	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	18.98	n/a	8/3/2022	220	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	18.98	n/a	8/4/2022	350	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	347.3	n/a	8/3/2022	440	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	347.3	n/a	8/4/2022	480	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	347.3	n/a	8/3/2022	430	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	347.3	n/a	8/3/2022	400	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	347.3	n/a	8/4/2022	620	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2

# Interwell Prediction Limits - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron (mg/L)</b>	<b>MGWC-1</b>	<b>0.18</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>1.7</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-12	0.18	n/a	8/2/2022	0.071J	No	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>0.18</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>1.9</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MGWC-3</b>	<b>0.18</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>0.76</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.18</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>2.3</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.18</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>4.3</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
Calcium (mg/L)	MGWC-1	110	n/a	8/3/2022	110	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	8/2/2022	34	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	8/4/2022	98	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	8/3/2022	110	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-7	110	n/a	8/3/2022	66	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	8/4/2022	100	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-1</b>	<b>9.419</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>13</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MGWC-12	9.419	n/a	8/2/2022	4.9	No	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>9.419</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>12</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-3</b>	<b>9.419</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>13</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>9.419</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>11</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-8</b>	<b>9.419</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>13</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Fluoride (mg/L)	MGWC-1	0.19	n/a	8/3/2022	0.12	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	8/2/2022	0.074J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-2	0.19	n/a	8/4/2022	0.072J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	8/3/2022	0.079J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>0.19</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>0.2</b>	<b>Yes</b>	<b>89</b>	<b>n/a</b>	<b>n/a</b>	<b>30.34</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002435</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	MGWC-8	0.19	n/a	8/4/2022	0.087J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	8.12	5	8/3/2022	7.23	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-12	8.12	5	8/2/2022	7.06	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-2	8.12	5	8/4/2022	7.37	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-3	8.12	5	8/3/2022	6.91	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-7	8.12	5	8/3/2022	6.86	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-8	8.12	5	8/4/2022	6.5	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-1</b>	<b>18.98</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>140</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-12	18.98	n/a	8/2/2022	3.1	No	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>18.98</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>150</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-3</b>	<b>18.98</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>130</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-7</b>	<b>18.98</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>220</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-8</b>	<b>18.98</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>350</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-1</b>	<b>347.3</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>440</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
TDS (mg/L)	MGWC-12	347.3	n/a	8/2/2022	150	No	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>347.3</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>480</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-3</b>	<b>347.3</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>430</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-7</b>	<b>347.3</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>400</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>347.3</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>620</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>

# Appendix III Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 2:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-6 (bg)	-0.0181	-113	-74	Yes	19	21.05	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1556	75	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2825	-119	-74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.08031	127	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.6102	86	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.2267	-95	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.19	-147	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.4452	-30	-25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.728	-143	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.6359	-121	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.3476	81	74	Yes	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.04044	-110	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.2711	-103	-74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.6906	-109	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-3.198	-137	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-25.14	-144	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	7.171	130	74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	51.84	106	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-33.49	-123	-74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	78.28	109	74	Yes	19	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 2:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	50	74	No	19	68.42	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	27	74	No	19	63.16	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	31	74	No	19	89.47	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-0.0181</b>	<b>-113</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>21.05</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWA-6A (bg)	0	4	25	No	9	77.78	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-1</b>	<b>0.1556</b>	<b>75</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>-0.2825</b>	<b>-119</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWC-3	-0.005228	-10	-74	No	19	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.08031</b>	<b>127</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.6102</b>	<b>86</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWA-10 (bg)	0	10	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.05739	-23	-74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.2267</b>	<b>-95</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-1.19</b>	<b>-147</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6A (bg)</b>	<b>-0.4452</b>	<b>-30</b>	<b>-25</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-1	0	-33	-74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>-1.728</b>	<b>-143</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-3	0	55	74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.6359</b>	<b>-121</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWC-8</b>	<b>0.3476</b>	<b>81</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	MGWA-10 (bg)	0	-42	-81	No	20	65	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	0	3	81	No	20	10	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.005052	-53	-81	No	20	20	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.005018	-47	-81	No	20	30	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0.00278	4	25	No	9	22.22	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.04044</b>	<b>-110</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.2711</b>	<b>-103</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>31.58</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-11 (bg)	0.1535	54	74	No	19	31.58	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.6906</b>	<b>-109</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-3.198</b>	<b>-137</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-6A (bg)	0.04466	1	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	3.306	43	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>-25.14</b>	<b>-144</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-3</b>	<b>7.171</b>	<b>130</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWC-7	4.244	72	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-8</b>	<b>51.84</b>	<b>106</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWA-10 (bg)	-4.115	-44	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	2.803	24	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	2.728	22	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	-0.8063	-28	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	-1.629	-2	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	12.56	43	74	No	19	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>-33.49</b>	<b>-123</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWC-3	8.178	52	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	11.15	53	74	No	19	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>78.28</b>	<b>109</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Upper Tolerance Limits Summary Table

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 2:59 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.002	n/a	n/a	n/a	n/a	76	90.79	n/a	0.02028	NP Inter(NDs)
Arsenic (mg/L)	0.014	n/a	n/a	n/a	n/a	86	36.05	n/a	0.01214	NP Inter(normality)
Barium (mg/L)	0.13	n/a	n/a	n/a	n/a	94	0	n/a	0.008054	NP Inter(normality)
Beryllium (mg/L)	0.0025	n/a	n/a	n/a	n/a	84	94.05	n/a	0.01345	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	n/a	n/a	94	98.94	n/a	0.008054	NP Inter(NDs)
Chromium (mg/L)	0.0063	n/a	n/a	n/a	n/a	84	71.43	n/a	0.01345	NP Inter(NDs)
Cobalt (mg/L)	0.0025	n/a	n/a	n/a	n/a	93	73.12	n/a	0.008478	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.133	n/a	n/a	n/a	n/a	95	0	No	0.05	Inter
Fluoride (mg/L)	0.19	n/a	n/a	n/a	n/a	89	30.34	n/a	0.01041	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	76	93.42	n/a	0.02028	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	94	29.79	n/a	0.008054	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	84	96.43	n/a	0.01345	NP Inter(NDs)
Molybdenum (mg/L)	0.015	n/a	n/a	n/a	n/a	84	61.9	n/a	0.01345	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	64	90.63	n/a	0.03752	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	84	82.14	n/a	0.01345	NP Inter(NDs)

<b>PLANT MCINTOSH AP 1 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006		0.002	0.006
Arsenic, Total (mg/L)	0.01		0.014	0.014
Barium, Total (mg/L)	2		0.13	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.0063	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0025	0.006
Combined Radium, Total (pCi/L)	5		1.13	5
Fluoride, Total (mg/L)	4		0.19	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.015	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

\*Grey cell indicates background is higher than MCL or CCR-Rule

\*GWPS = Groundwater Protection Standard

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residuals



# Confidence Intervals - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 3:48 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-7	0.009999	0.007211	0.006	Yes	21	0.002527	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01617	0.007699	0.006	Yes	21	0.007674	0	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	21	0.01973	0	No	0.01	NP (normality)

# Confidence Intervals - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 3:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Antimony (mg/L)	MGWC-12	0.002	0.0015	0.006	No	17	0.0003993	88.24	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	17	0.0004123	94.12	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	17	0.000007276	94.12	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002834	0.001943	0.014	No	21	0.0008071	0	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001094	0.0006639	0.014	No	21	0.0003749	28.57	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	21	0.0002026	80.95	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.001655	0.001381	0.014	No	21	0.0002966	4.762	x^2	0.01	Param.
Arsenic (mg/L)	MGWC-7	0.0008262	0.0005152	0.014	No	21	0.000285	33.33	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00075	0.014	No	21	0.0001985	71.43	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	21	0.01638	0	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06521	0.04964	2	No	21	0.01411	0	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.0541	0.04851	2	No	21	0.005071	0	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.155	0.1406	2	No	21	0.01307	0	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.014	0.01	2	No	21	0.006775	4.762	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.03939	0.03341	2	No	21	0.005427	0	No	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	19	0.0005322	94.74	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	19	0.0005024	94.74	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001229	0.0006733	0.004	No	19	0.0007274	15.79	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	21	0.0009202	80.95	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.003033	0.001189	0.005	No	21	0.00193	0	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00041	0.005	No	21	0.0006563	90.48	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.00137	0.0005485	0.005	No	21	0.001205	28.57	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.002	0.1	No	19	0.0003671	94.74	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.002	0.1	No	19	0.006185	89.47	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	19	0.0002982	94.74	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	19	0.0002294	94.74	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	19	0.000347	89.47	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.002	0.1	No	19	0.0002524	94.74	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.0004	0.006	No	21	0.001038	61.9	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	21	0.0005452	90.48	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.003281	0.002446	0.006	No	21	0.0007569	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	21	0.0007039	14.29	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>MGWC-7</b>	<b>0.009999</b>	<b>0.007211</b>	<b>0.006</b>	<b>Yes</b>	<b>21</b>	<b>0.002527</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.01617</b>	<b>0.007699</b>	<b>0.006</b>	<b>Yes</b>	<b>21</b>	<b>0.007674</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.706	1.282	5	No	22	0.3954	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7565	0.4456	5	No	21	0.2817	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.7266	0.454	5	No	21	0.247	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.715	1.344	5	No	22	0.3456	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.278	0.9311	5	No	21	0.3147	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	1.985	1.41	5	No	21	0.5214	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.2348	0.143	4	No	20	0.08087	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.2505	0.1822	4	No	20	0.06008	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.1101	0.07275	4	No	20	0.02986	35	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MGWC-3	0.1	0.082	4	No	20	0.036	30	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3358	0.2206	4	No	20	0.1014	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.1134	0.08276	4	No	20	0.02701	15	No	0.01	Param.
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	17	0.0002183	94.12	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	17	0.000302	82.35	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	17	0.0001892	94.12	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01235	0.01025	0.04	No	21	0.0019	4.762	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.02202	0.01621	0.04	No	21	0.005262	0	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.006755	0.005191	0.04	No	21	0.001756	4.762	ln(x)	0.01	Param.
Lithium (mg/L)	MGWC-3	0.01339	0.01139	0.04	No	21	0.001818	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>MGWC-7</b>	<b>0.13</b>	<b>0.112</b>	<b>0.04</b>	<b>Yes</b>	<b>21</b>	<b>0.01973</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	MGWC-8	0.03794	0.02664	0.04	No	21	0.01024	0	No	0.01	Param.
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.002	No	19	0.00003789	89.47	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.002	No	19	0.00003519	89.47	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.002	No	19	0.00002982	94.74	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.002	No	19	0.00002753	94.74	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00021	0.00014	0.002	No	20	0.000881	40	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0011	0.1	No	19	0.005662	21.05	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.0014	0.1	No	19	0.006491	68.42	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	19	0.002636	94.74	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	19	0.002592	94.74	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	15	0.001162	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	15	0.001221	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	15	0.001175	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	15	0.001177	93.33	No	0.01	NP (NDs)

# Confidence Intervals - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 3:48 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Selenium (mg/L)	MGWC-7	0.005	0.00026	0.05	No	15	0.001224	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.00038	0.05	No	15	0.001962	73.33	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00016	0.002	No	19	0.0003821	73.68	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	19	0.0002499	89.47	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	19	0.0001812	94.74	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	19	0.0002344	89.47	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.001	0.00016	0.002	No	19	0.0003598	26.32	No	0.01	NP (normality)

# Appendix IV Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 3:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.003436</b>	<b>109</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

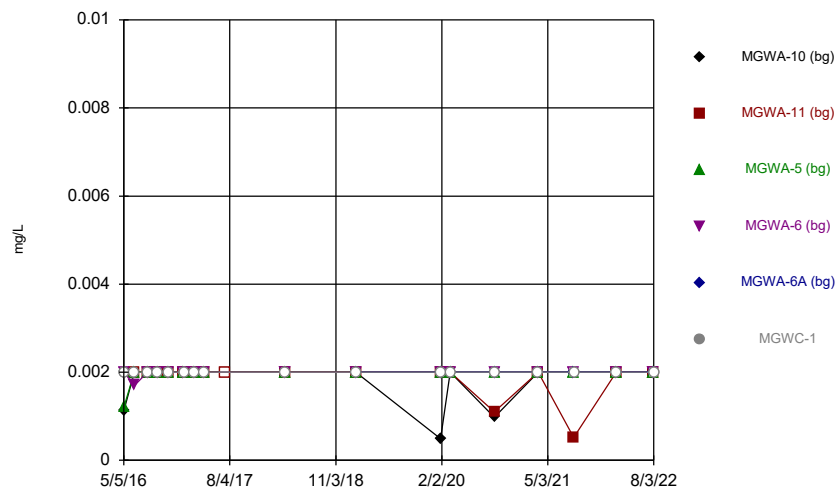
# Appendix IV Trend Tests - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 3:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWA-10 (bg)	0	-3	-87	No	21	85.71	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	20	87	No	21	95.24	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	17	81	No	20	95	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	-13	-87	No	21	42.86	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6A (bg)	0	0	30	No	10	20	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-7	-0.0004758	-63	-87	No	21	0	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.003436</b>	<b>109</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Lithium (mg/L)	MGWA-10 (bg)	0.00004732	8	87	No	21	4.762	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0008924	35	87	No	21	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0003448	44	87	No	21	4.762	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6 (bg)	0	6	87	No	21	95.24	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.0002362	-26	-30	No	10	60	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWC-7	0	9	87	No	21	0	n/a	n/a	0.01	NP

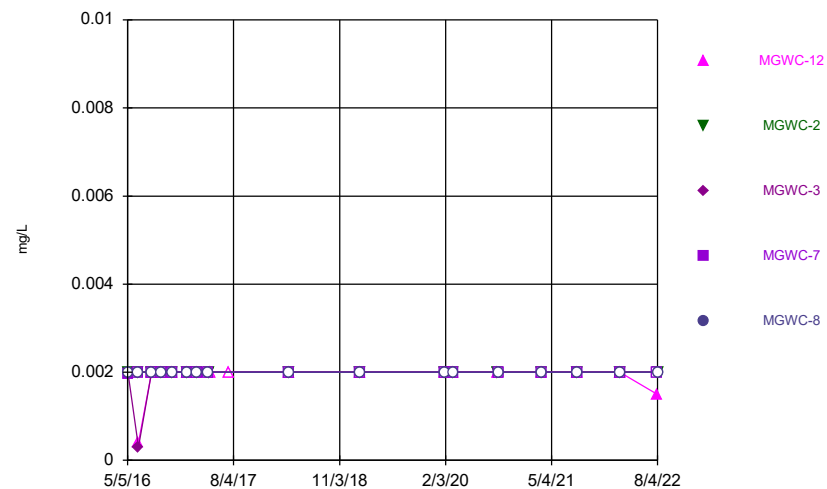
FIGURE A.

### Time Series



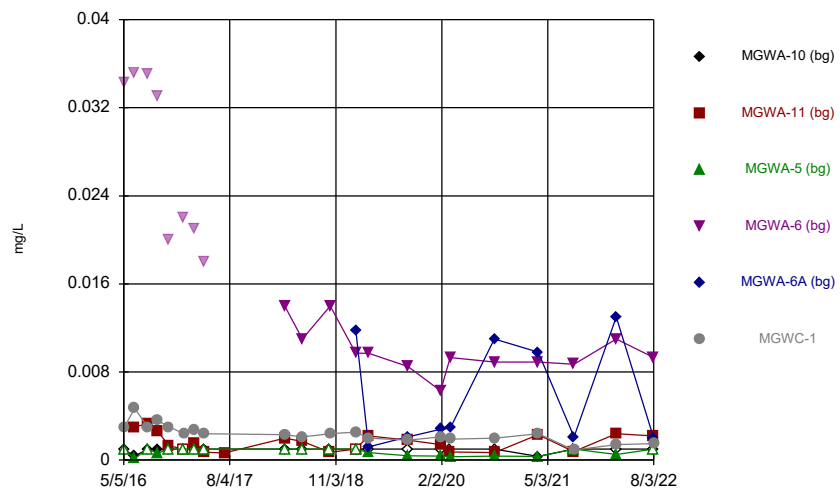
Constituent: Antimony Analysis Run 11/10/2022 2:30 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



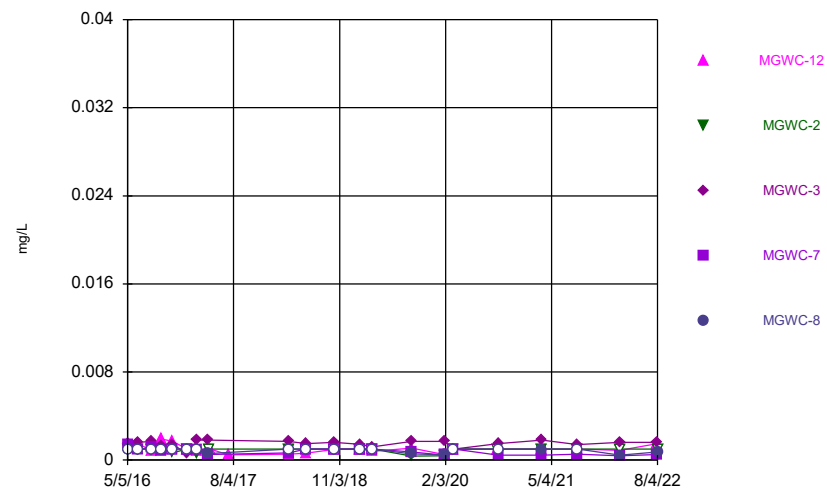
Constituent: Antimony Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



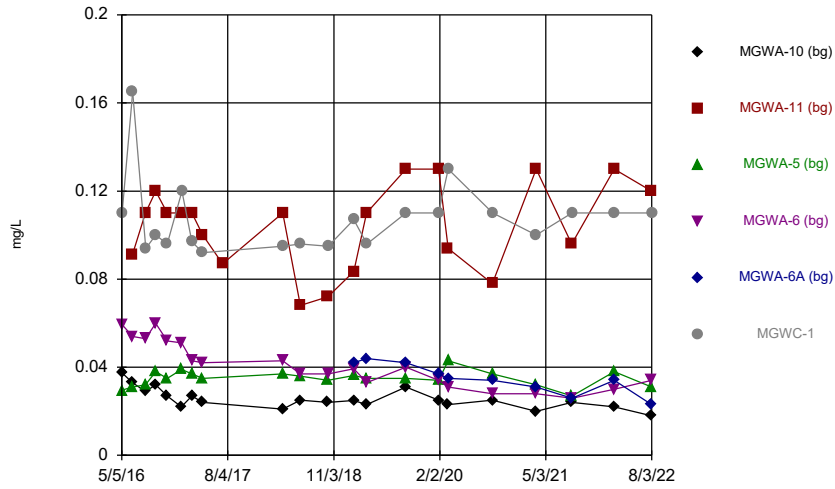
Constituent: Arsenic Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: Arsenic Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

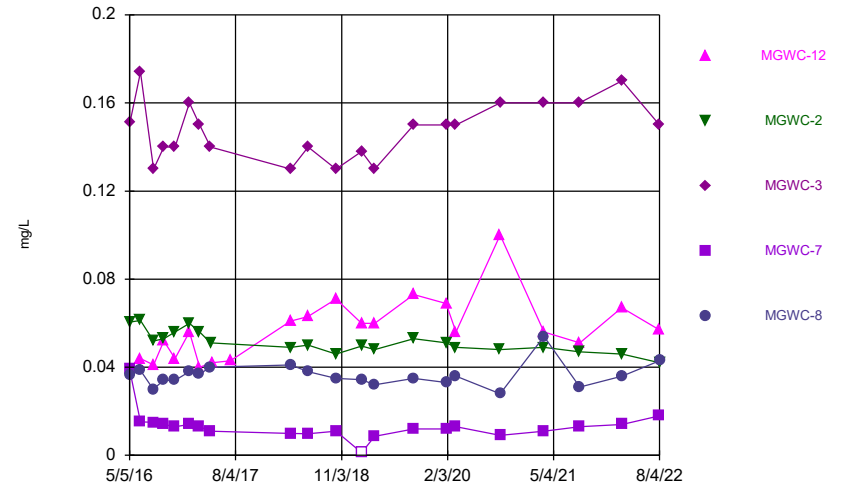
Time Series



Constituent: Barium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

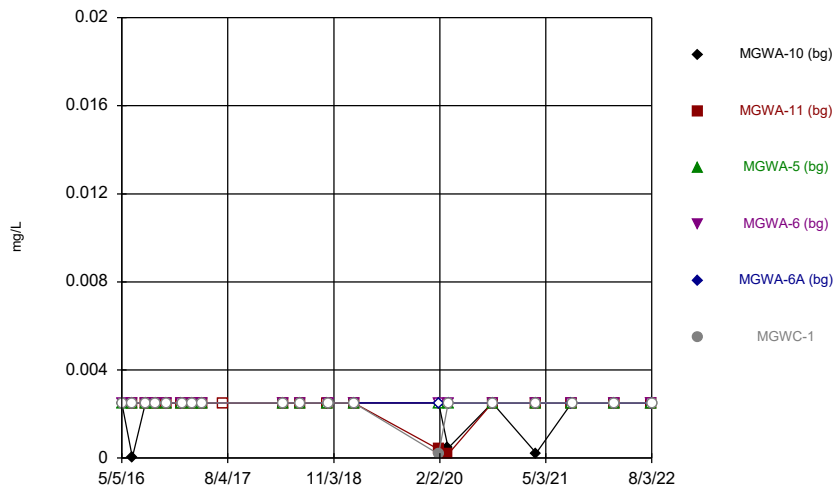
Time Series



Constituent: Barium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

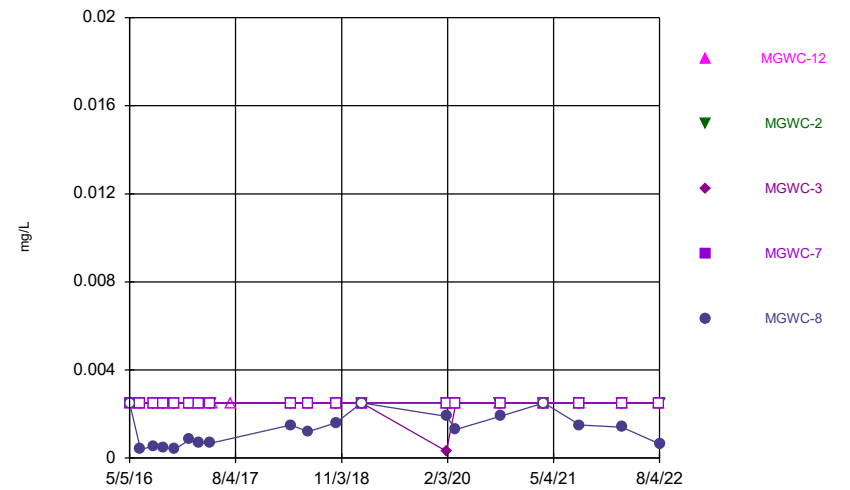
Time Series



Constituent: Beryllium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

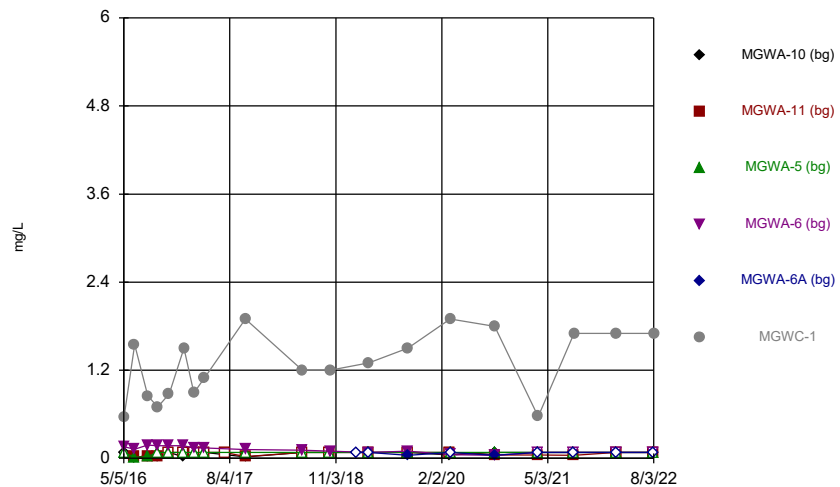
Time Series



Constituent: Beryllium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

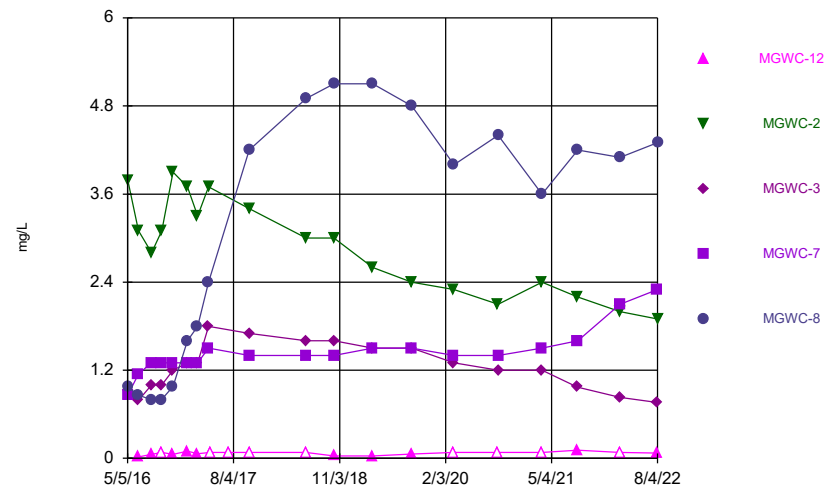


### Time Series



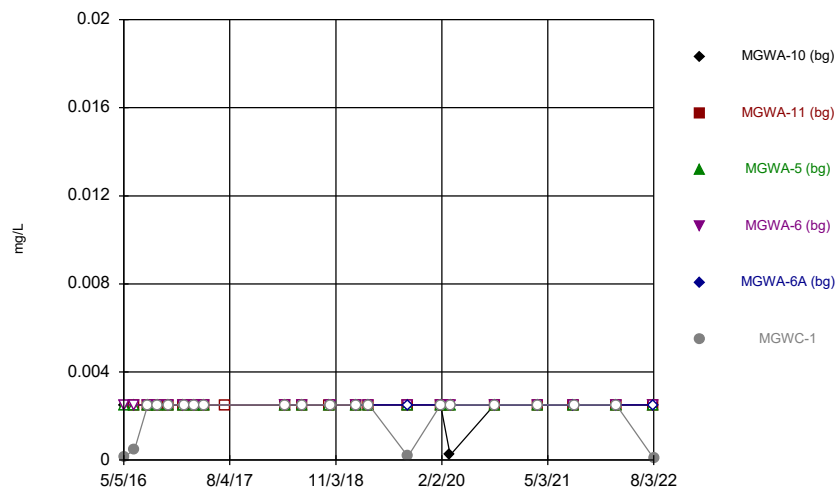
Constituent: Boron Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



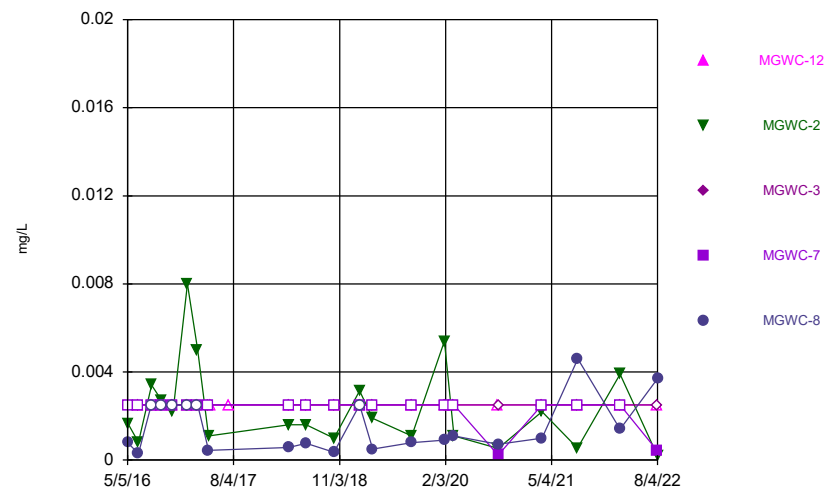
Constituent: Boron Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



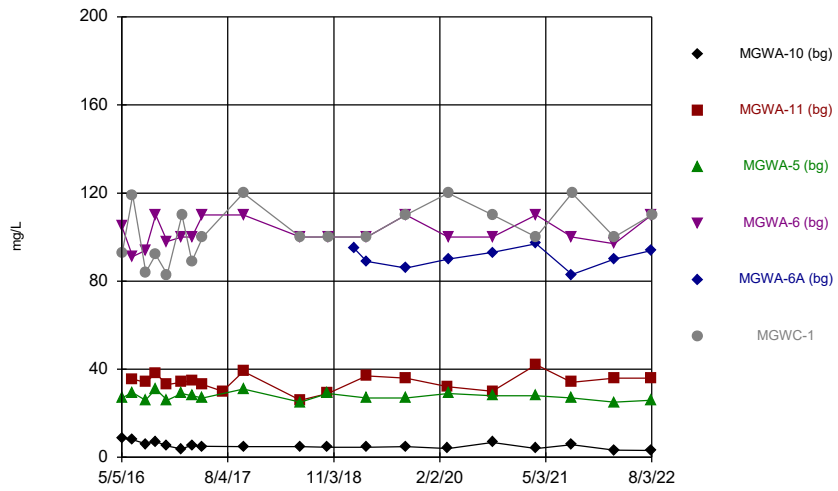
Constituent: Cadmium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



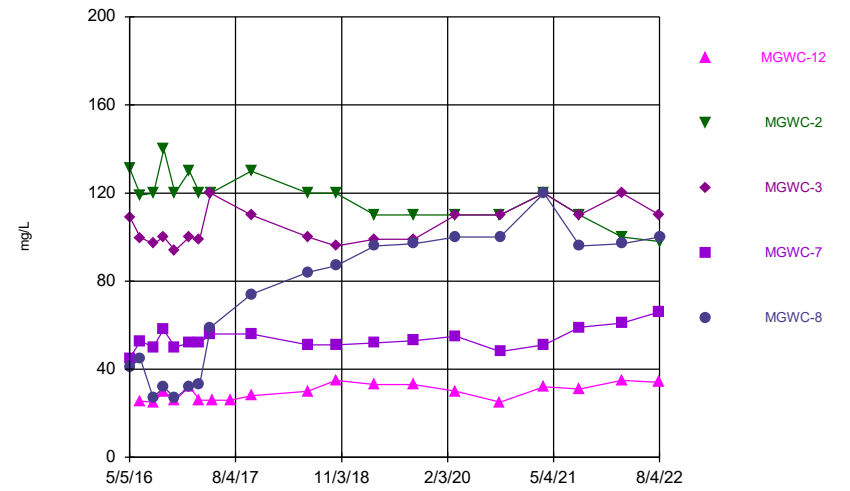
Constituent: Cadmium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



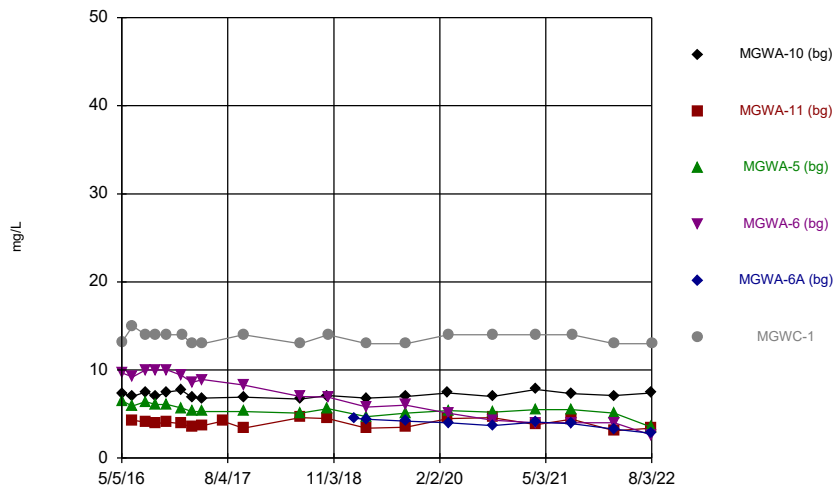
Constituent: Calcium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



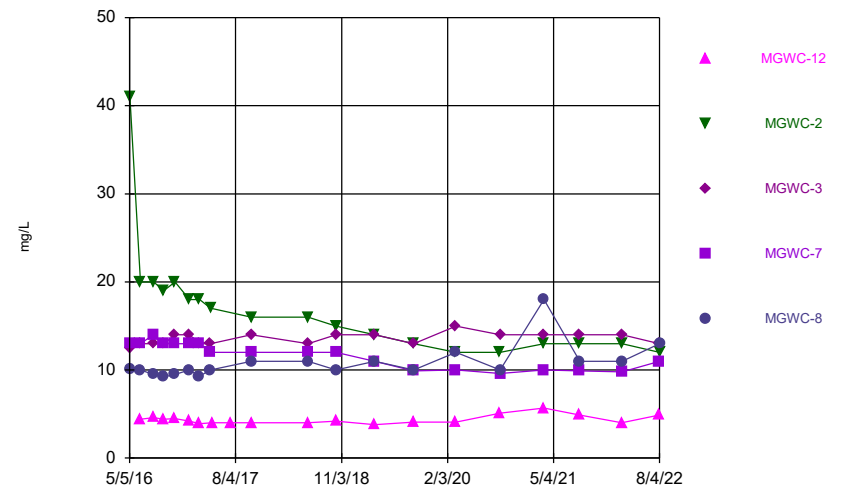
Constituent: Calcium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



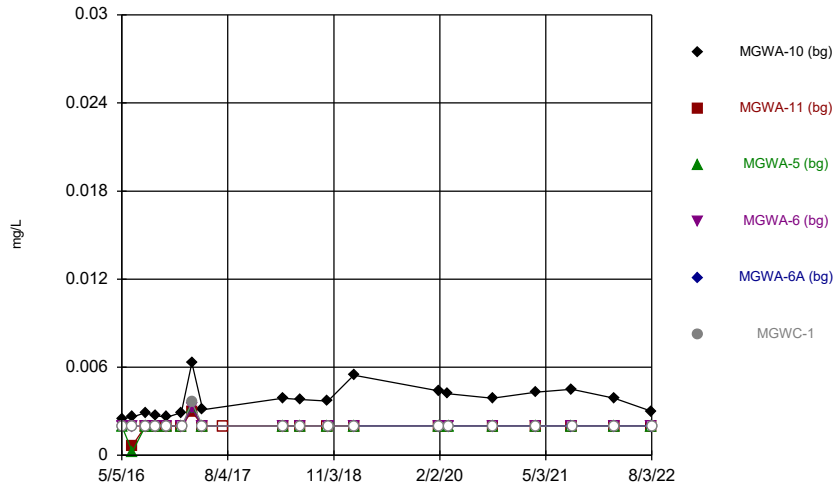
Constituent: Chloride Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



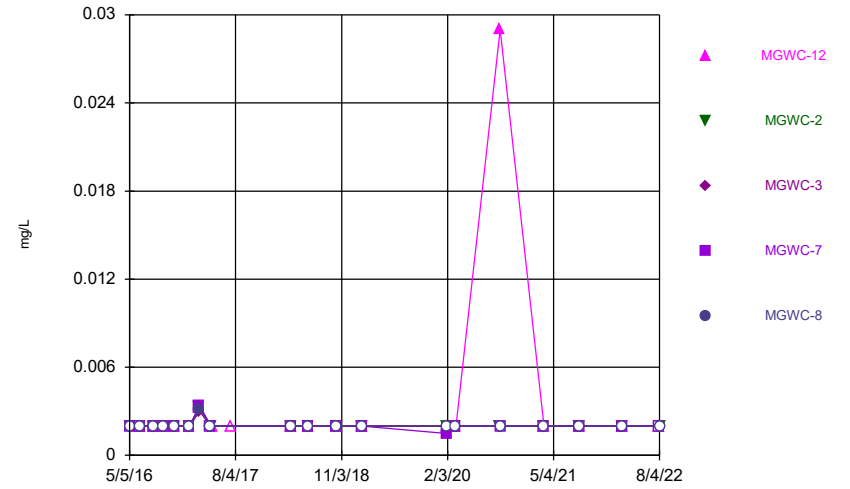
Constituent: Chloride Analysis Run 11/10/2022 2:31 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



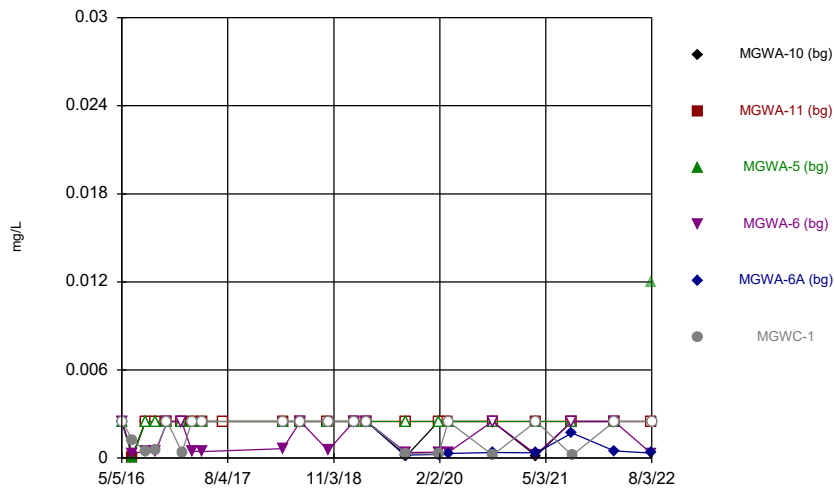
Constituent: Chromium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



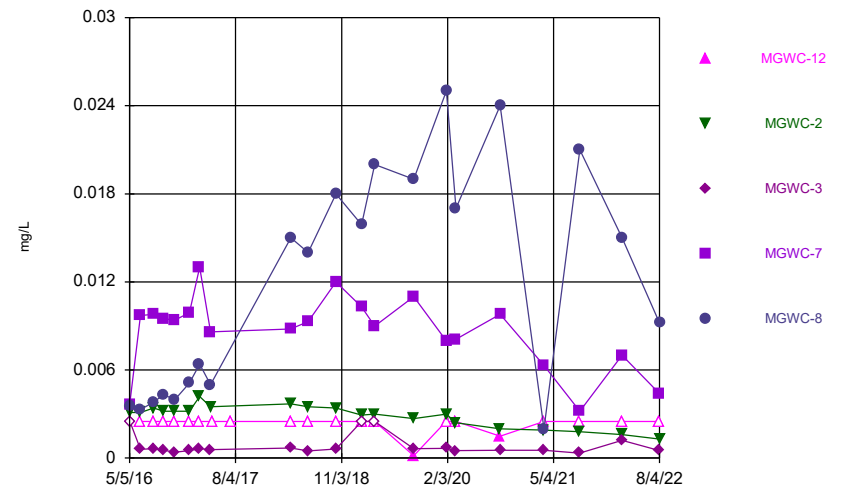
Constituent: Chromium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



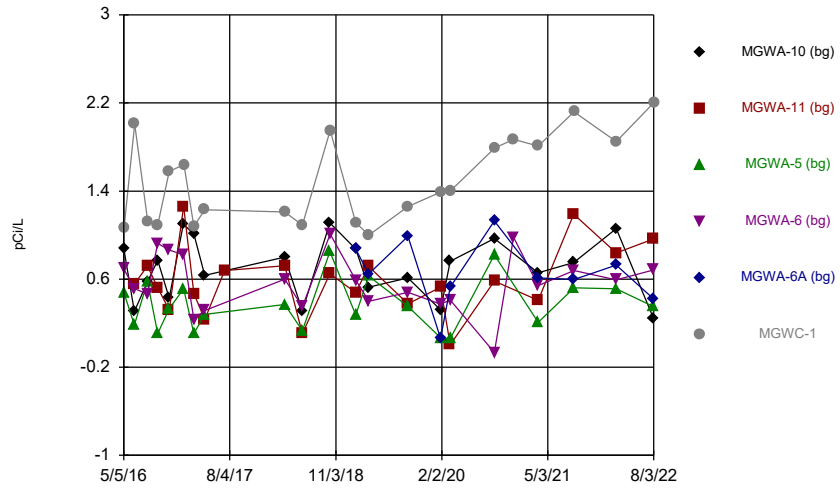
Constituent: Cobalt Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



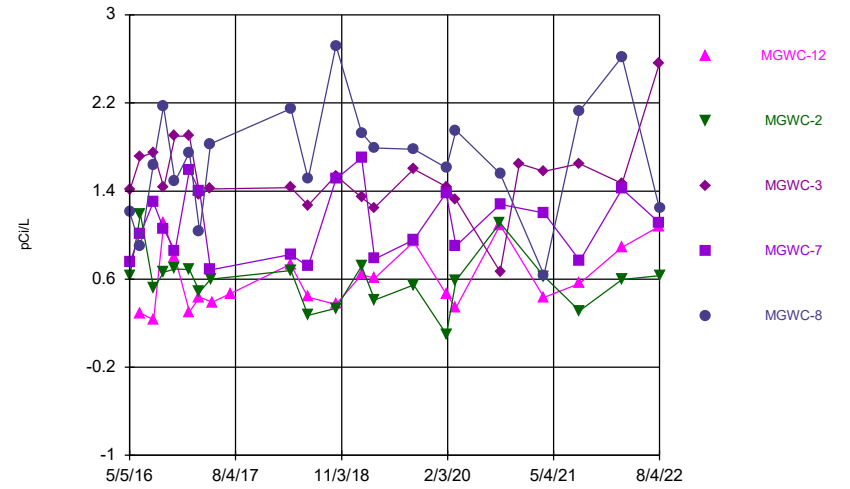
Constituent: Cobalt Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



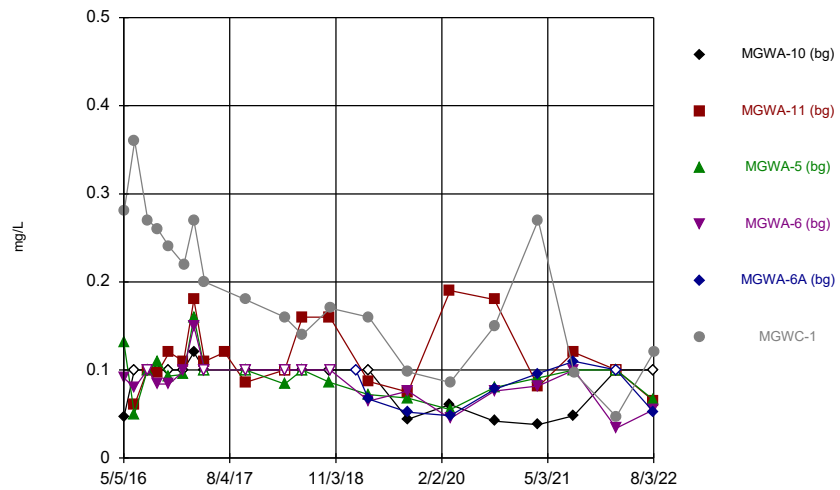
Constituent: Combined Radium 226 + 228 Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



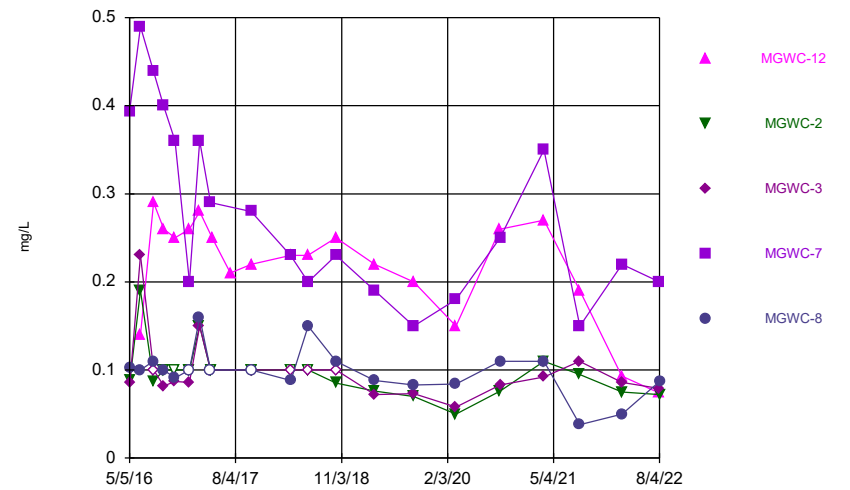
Constituent: Combined Radium 226 + 228 Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



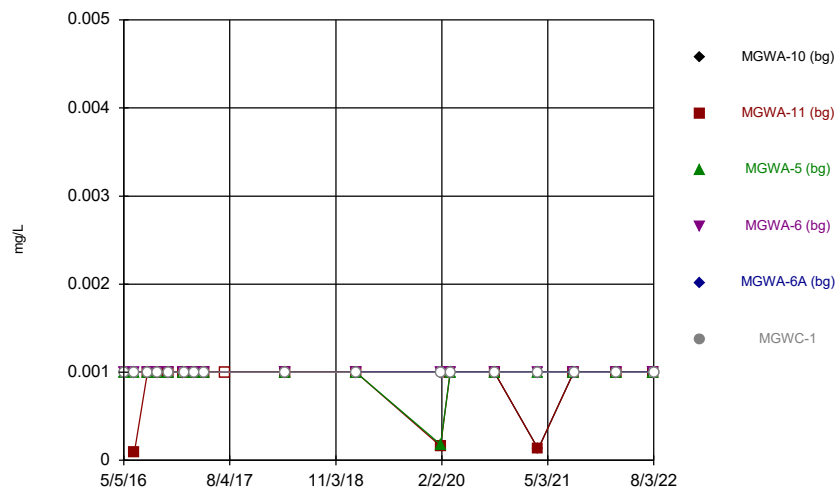
Constituent: Fluoride Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



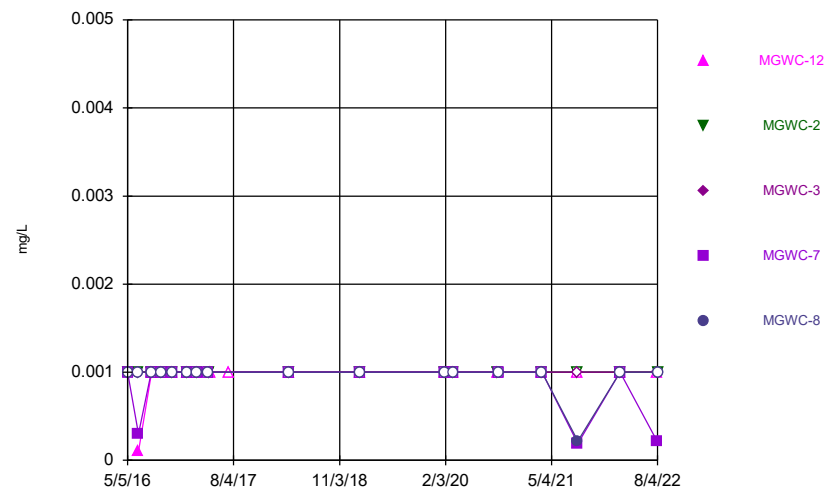
Constituent: Fluoride Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



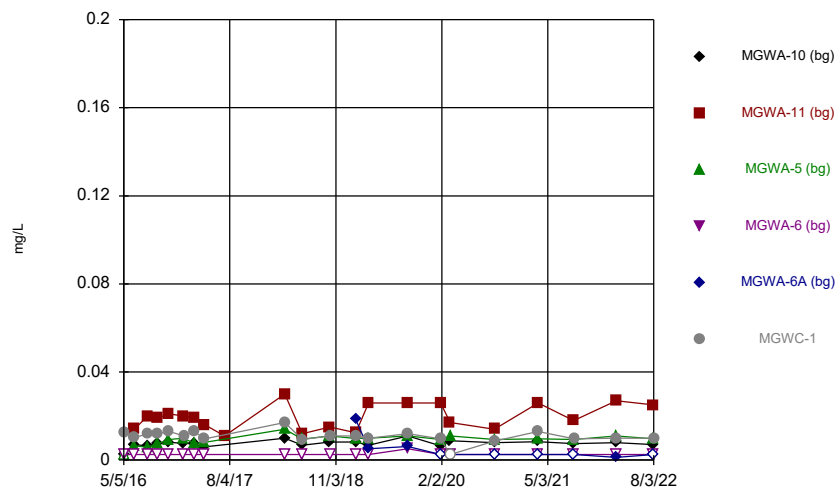
Constituent: Lead Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



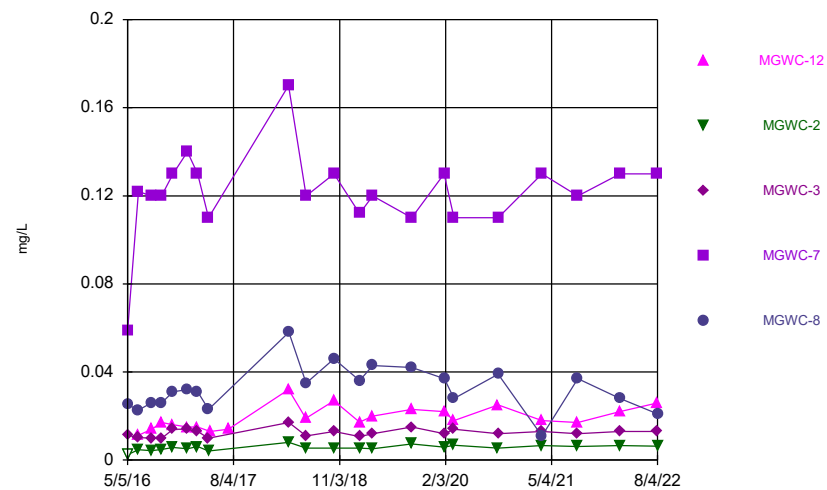
Constituent: Lead Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



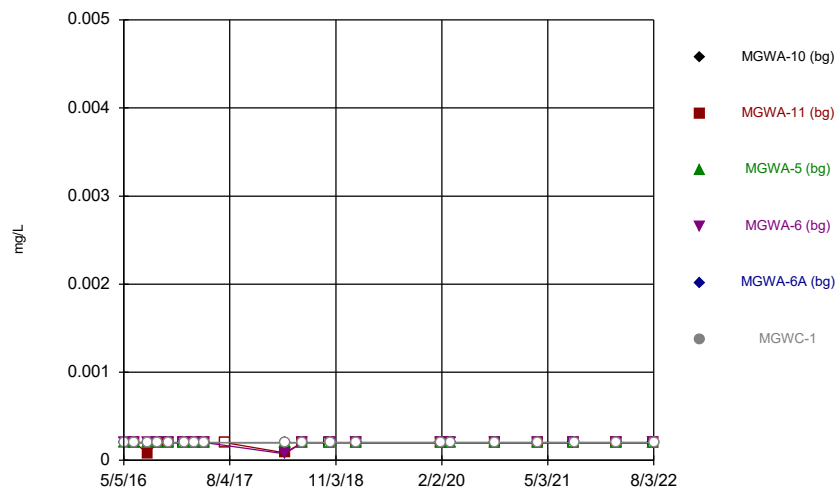
Constituent: Lithium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



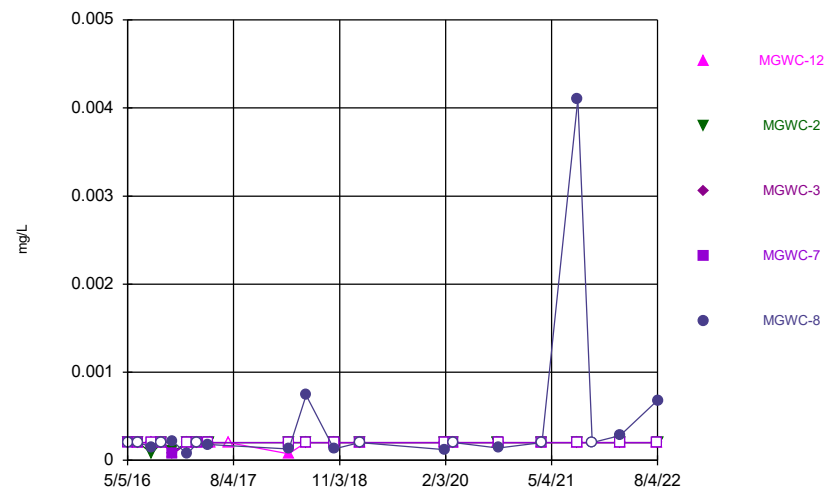
Constituent: Lithium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



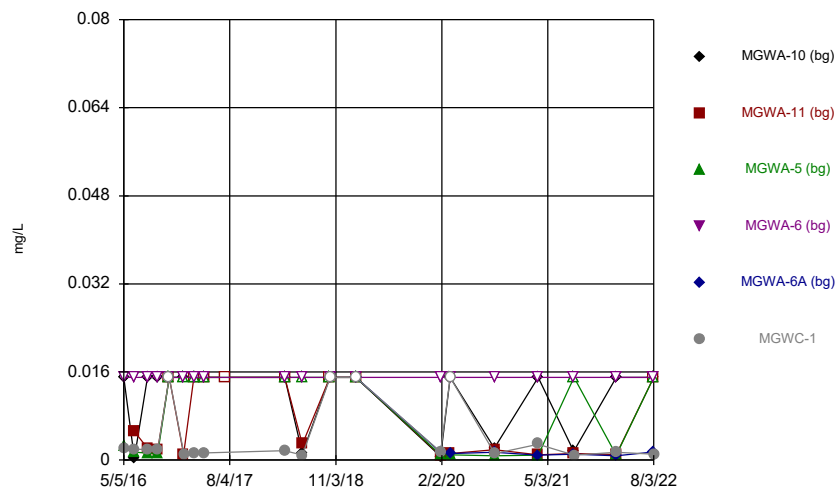
Constituent: Mercury Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



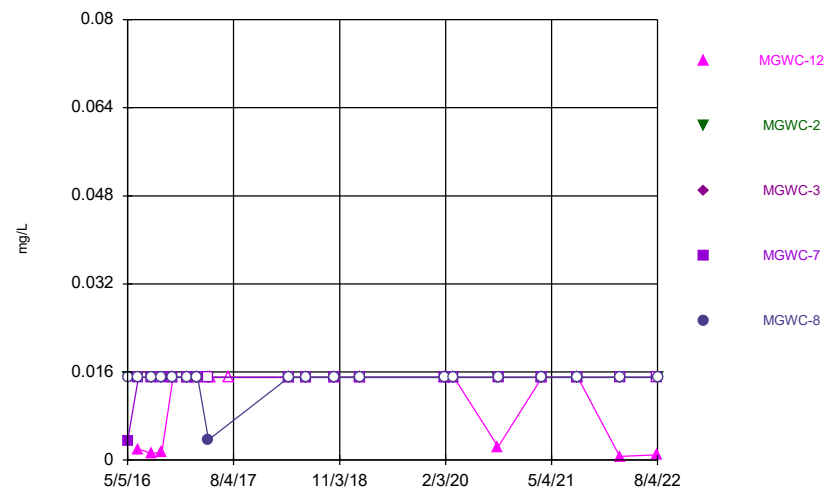
Constituent: Mercury Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



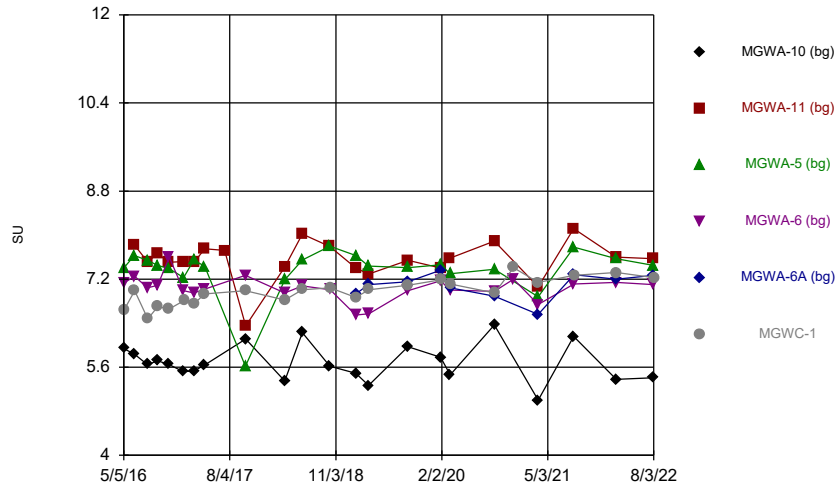
Constituent: Molybdenum Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



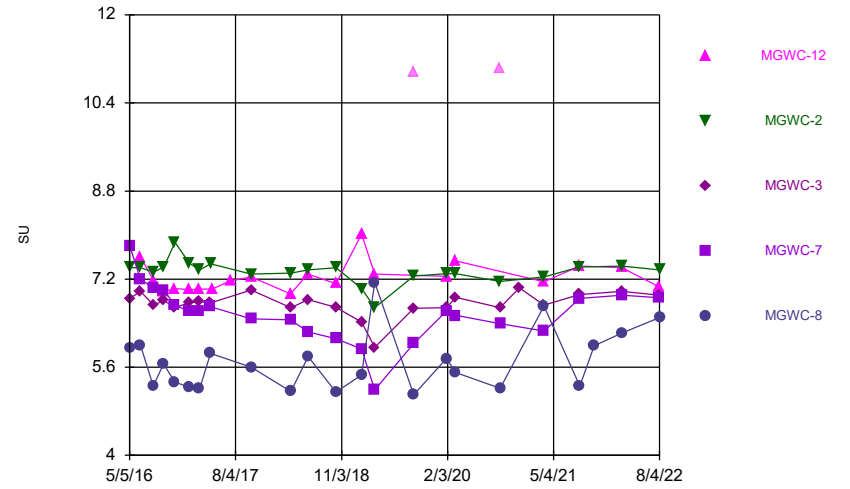
Constituent: Molybdenum Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



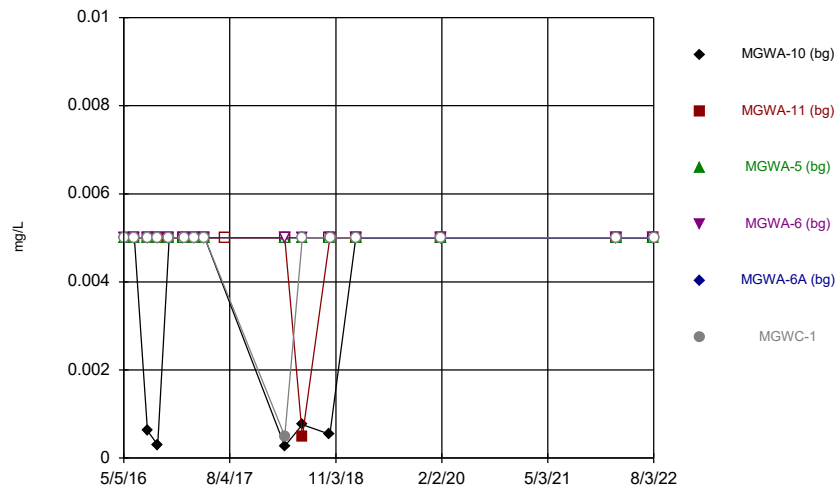
Constituent: pH Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



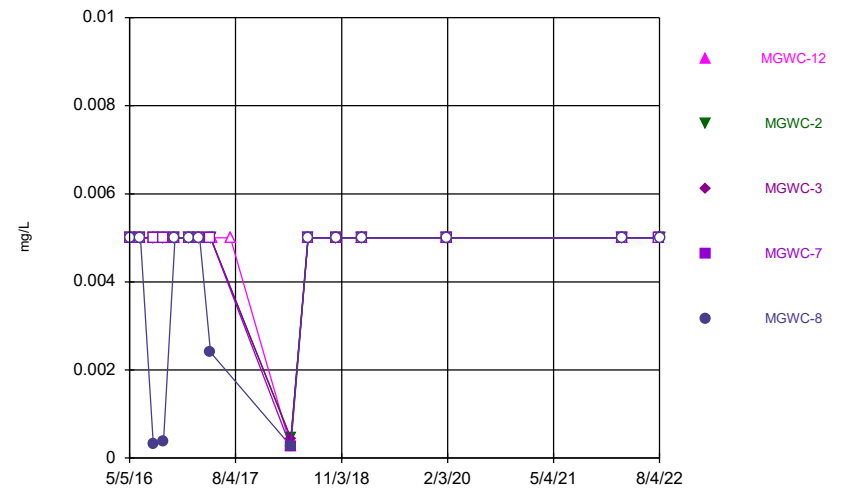
Constituent: pH Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



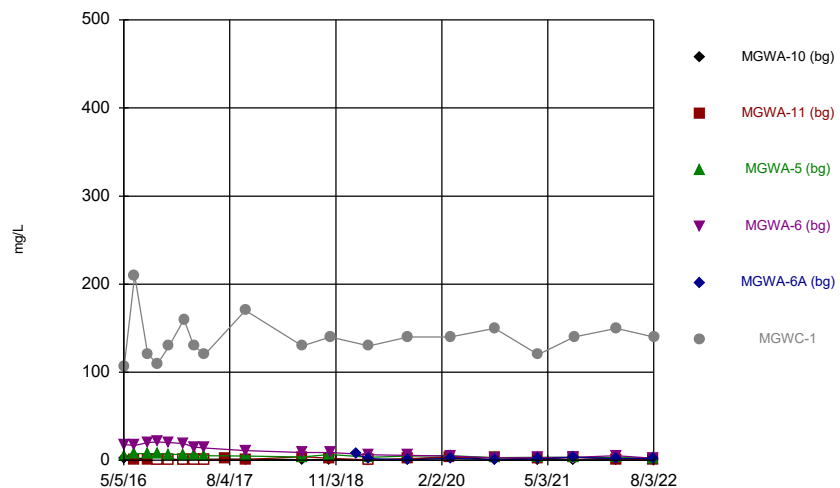
Constituent: Selenium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



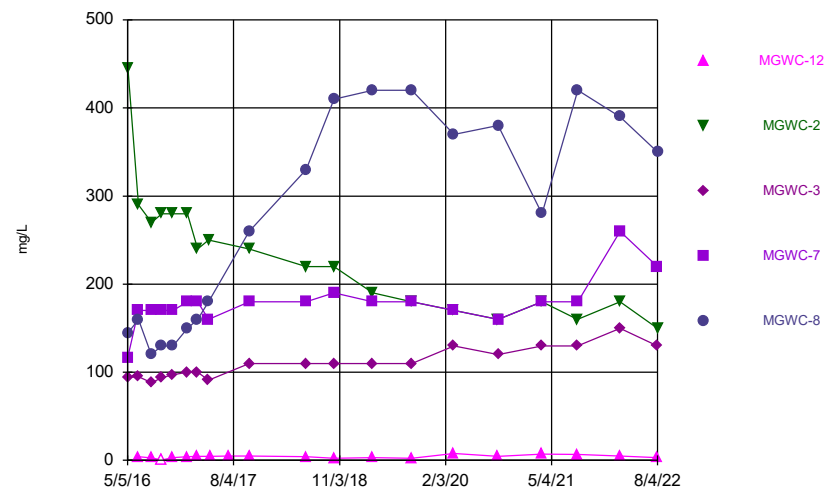
Constituent: Selenium Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



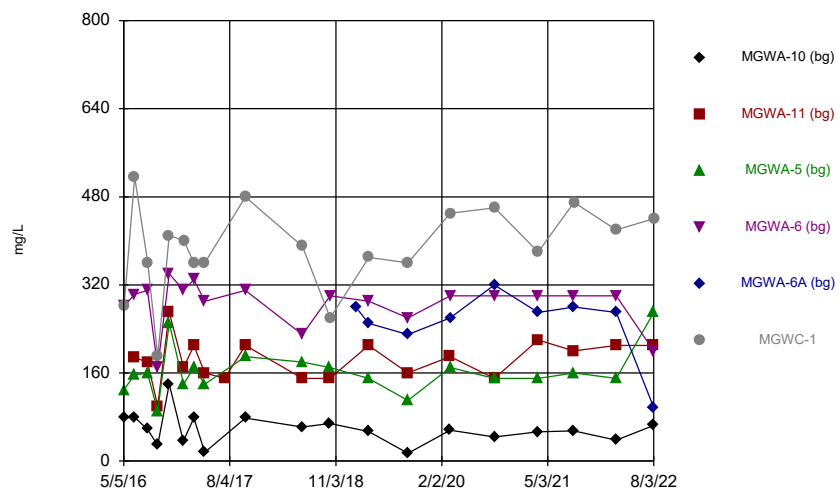
Constituent: Sulfate Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



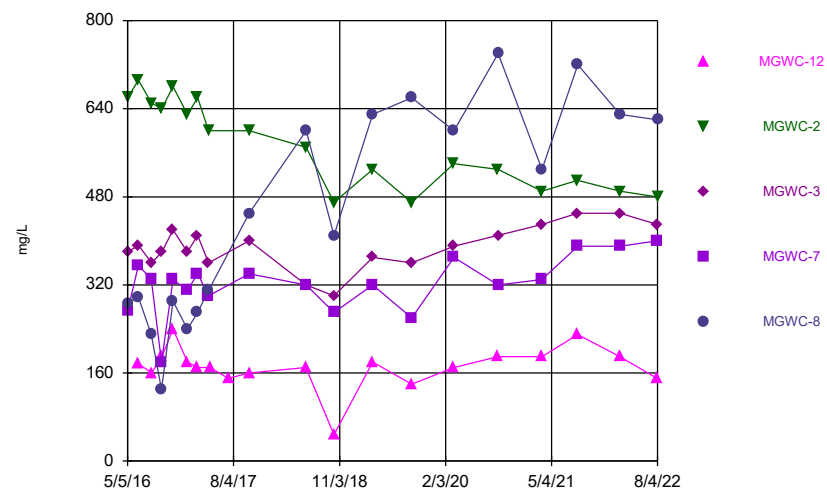
Constituent: Sulfate Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: TDS Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

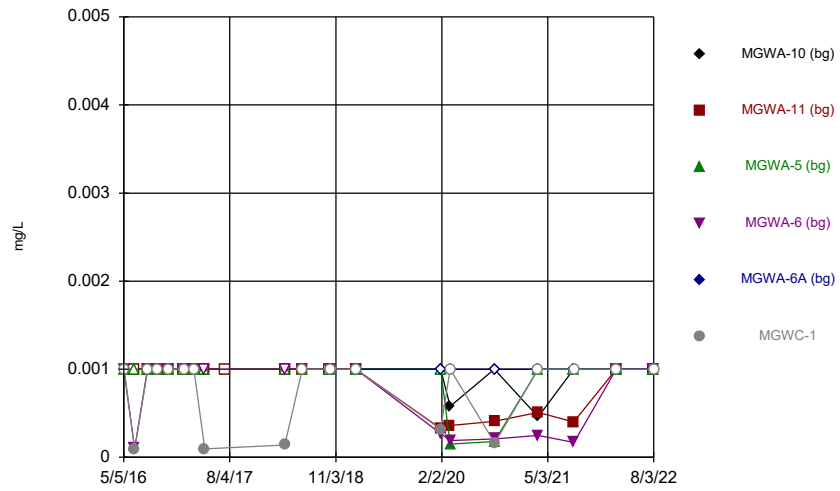
### Time Series



Constituent: TDS Analysis Run 11/10/2022 2:31 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

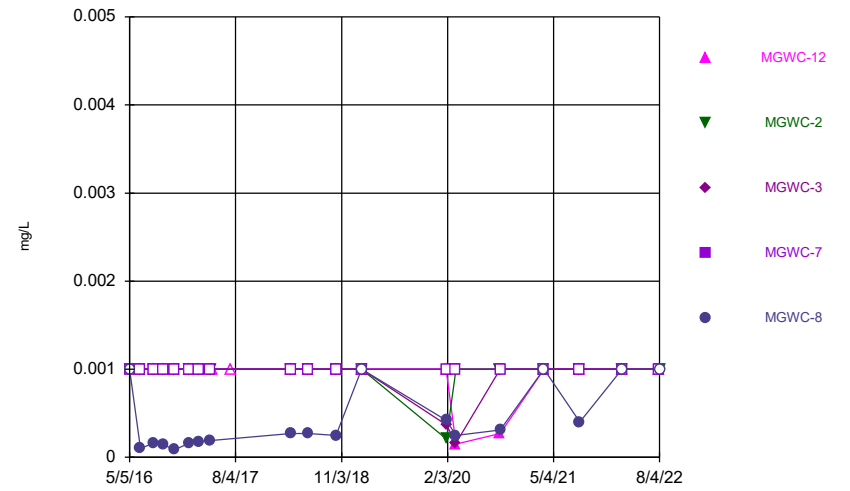


### Time Series



Constituent: Thallium    Analysis Run 11/10/2022 2:31 PM    View: Constituents View  
Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond

### Time Series



Constituent: Thallium    Analysis Run 11/10/2022 2:31 PM    View: Constituents View  
Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.00112 (J)		0.0012 (J)	<0.002		
5/6/2016						<0.002
6/20/2016	<0.002	<0.002	<0.002			
6/21/2016				0.0017 (J)		<0.002
8/15/2016	<0.002	<0.002	<0.002	<0.002		
8/16/2016						<0.002
9/28/2016	<0.002	<0.002	<0.002	<0.002		<0.002
11/16/2016	<0.002	<0.002	<0.002	<0.002		<0.002
1/16/2017	<0.002					
1/17/2017		<0.002	<0.002	<0.002		
1/19/2017						<0.002
3/2/2017	<0.002	<0.002	<0.002	<0.002		<0.002
4/18/2017	<0.002	<0.002	<0.002	<0.002		<0.002
7/13/2017		<0.002				
3/29/2018	<0.002	<0.002	<0.002	<0.002		<0.002
1/28/2019	<0.002	<0.002				
1/29/2019			<0.002	<0.002	<0.002	<0.002
1/28/2020	0.00049 (J)	<0.002	<0.002	<0.002	<0.002	
1/29/2020						<0.002
3/9/2020	<0.002	<0.002				
3/10/2020			<0.002	<0.002	<0.002	<0.002
9/16/2020	0.00098 (J)	0.0011 (J)	<0.002	<0.002	<0.002	
9/17/2020						<0.002
3/23/2021	<0.002	<0.002		<0.002	<0.002	
3/24/2021			<0.002			<0.002
8/23/2021	<0.002	0.00052 (J)				
8/24/2021			<0.002	<0.002	<0.002	
8/25/2021						<0.002
2/22/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/2/2022	<0.002	<0.002	<0.002	<0.002	<0.002	
8/3/2022						<0.002

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.00197 (J)	<0.002
5/6/2016		<0.002	<0.002		
6/21/2016	0.0004 (J)	<0.002	0.0003 (J)	<0.002	<0.002
8/15/2016				<0.002	<0.002
8/16/2016	<0.002	<0.002	<0.002		
9/28/2016				<0.002	<0.002
9/29/2016	<0.002	<0.002	<0.002		
11/16/2016	<0.002	<0.002	<0.002	<0.002	<0.002
1/17/2017			<0.002	<0.002	<0.002
1/18/2017	<0.002	<0.002			
3/2/2017	<0.002	<0.002	<0.002	<0.002	<0.002
4/18/2017			<0.002	<0.002	<0.002
4/19/2017		<0.002			
4/25/2017	<0.002				
7/13/2017	<0.002				
3/29/2018	<0.002			<0.002	
3/30/2018		<0.002	<0.002		<0.002
1/29/2019	<0.002	<0.002	<0.002	<0.002	<0.002
1/28/2020	<0.002			<0.002	
1/29/2020		<0.002	<0.002		<0.002
3/10/2020	<0.002	<0.002	<0.002	<0.002	<0.002
9/16/2020	<0.002	<0.002			
9/17/2020			<0.002	<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002	<0.002	<0.002
8/24/2021		<0.002	<0.002		
8/25/2021	<0.002			<0.002	<0.002
2/22/2022	<0.002				
2/23/2022		<0.002	<0.002	<0.002	<0.002
8/2/2022	0.0015 (J)				
8/3/2022			<0.002	<0.002	
8/4/2022		<0.002			<0.002

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.001		<0.001	0.0343		
5/6/2016						0.00299 (J)
6/20/2016	0.00036 (J)	0.003 (J)	0.00014 (J)			
6/21/2016				0.0352		0.0047 (J)
8/15/2016	0.00096 (J)	0.0033	<0.001	0.035		
8/16/2016						0.003
9/28/2016	0.00095 (J)	0.0026	0.00062 (J)	0.033		0.0036
11/16/2016	<0.001	0.0013	<0.001	0.02		0.003
1/16/2017	<0.001					
1/17/2017		<0.001	<0.001	0.022		
1/19/2017						0.0024
3/2/2017	<0.001	0.0015	<0.001	0.021		0.0027
4/18/2017	<0.001	0.00071 (J)	<0.001	0.018		0.0024
7/13/2017		0.00066 (J)				
3/29/2018	<0.001	0.002	<0.001	0.014		0.0023
6/12/2018	<0.001	0.0017	<0.001			
6/13/2018				0.011		0.0021
10/9/2018	<0.001	0.00072 (J)	<0.001			
10/10/2018				0.014		0.0024
1/28/2019	<0.001	<0.001				
1/29/2019			<0.001	0.00972	0.0118	0.00255
3/25/2019	<0.001	0.0022	0.00069 (J)		0.0012 (J)	
3/26/2019				0.0097		0.002
9/10/2019	<0.001	0.0018	0.00039 (J)	0.0085	0.0021	0.0018
1/28/2020	<0.001	0.0014	0.00036 (J)	0.0063	0.0028	
1/29/2020						0.0021
3/9/2020	<0.001	0.00073 (J)				
3/10/2020			0.00031 (J)	0.0093	0.0029	0.0019
9/16/2020	<0.001	0.00069 (J)	0.00035 (J)	0.0089	0.011	
9/17/2020						0.002
3/23/2021	0.00033 (J)	0.0023		0.0089	0.0098	
3/24/2021			0.00033 (J)			0.0024
8/23/2021	<0.001	0.00077 (J)				
8/24/2021			<0.001	0.0087	0.0021	
8/25/2021						0.00092 (J)
2/22/2022	<0.001	0.0024	0.00052 (J)	0.011	0.013	0.0014
8/2/2022	<0.001	0.0022	<0.001	0.0093	0.002	
8/3/2022						0.0015

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.00143 (J)	<0.001
5/6/2016		<0.001	0.00154 (J)		
6/21/2016	0.0015 (J)	<0.001	0.0016 (J)	0.0009 (J)	<0.001
8/15/2016				0.0012 (J)	<0.001
8/16/2016	0.00082 (J)	<0.001	0.0017		
9/28/2016				0.00084 (J)	<0.001
9/29/2016	0.0019	<0.001	0.0013		
11/16/2016	0.0017	0.00068 (J)	0.0014	<0.001	<0.001
1/17/2017			0.00056 (J)	<0.001	<0.001
1/18/2017	0.00096 (J)	<0.001			
3/2/2017	0.00082 (J)	0.00065 (J)	0.0018	0.0009 (J)	<0.001
4/18/2017			0.0018	0.0005 (J)	0.00059 (J)
4/19/2017		<0.001			
4/25/2017	<0.001				
7/13/2017	0.00047 (J)				
3/29/2018	0.00053 (J)			0.00066 (J)	
3/30/2018		<0.001	0.0017		<0.001
6/12/2018	0.00063 (J)				
6/13/2018		<0.001	0.0015	<0.001	<0.001
10/10/2018	0.00098 (J)	<0.001	0.0016	<0.001	<0.001
1/29/2019	<0.001	<0.001	0.00143	<0.001	<0.001
3/26/2019	0.00079 (J)	<0.001	0.0012 (J)	<0.001	<0.001
9/10/2019	0.0011	0.00036 (J)	0.0017	0.00074 (J)	0.00056 (J)
1/28/2020	0.00051 (J)			0.00046 (J)	
1/29/2020		0.0004 (J)	0.0017		0.00047 (J)
3/10/2020	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/2020	<0.001	<0.001			
9/17/2020			0.0015	0.00045 (J)	<0.001
3/24/2021	<0.001	<0.001	0.0018	0.00046 (J)	0.00099 (J)
8/24/2021		<0.001	0.0014		
8/25/2021	<0.001			0.00055 (J)	<0.001
2/22/2022	0.00089 (J)				
2/23/2022		<0.001	0.0016	0.0004 (J)	0.00044 (J)
8/2/2022	0.0015				
8/3/2022			0.0016	0.00052 (J)	
8/4/2022		<0.001			0.00075 (J)

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.0376		0.0295	0.0595		
5/6/2016						0.11
6/20/2016	0.033	0.091	0.031			
6/21/2016				0.0539		0.165
8/15/2016	0.029	0.11	0.032	0.053		
8/16/2016						0.094
9/28/2016	0.032	0.12	0.038	0.06		0.1
11/16/2016	0.027	0.11	0.035	0.052		0.096
1/16/2017	0.022					
1/17/2017		0.11	0.039	0.051		
1/19/2017						0.12
3/2/2017	0.027	0.11	0.037	0.043		0.097
4/18/2017	0.024	0.1	0.035	0.042		0.092
7/13/2017		0.087				
3/29/2018	0.021	0.11	0.037	0.043		0.095
6/12/2018	0.025	0.068	0.036			
6/13/2018				0.037		0.096
10/9/2018	0.024	0.072	0.034			
10/10/2018				0.037		0.095
1/28/2019	0.0249	0.0834				
1/29/2019			0.0363	0.0393	0.0421	0.107
3/25/2019	0.023	0.11	0.035		0.044	
3/26/2019				0.033		0.096
9/10/2019	0.031	0.13	0.035	0.04	0.042	0.11
1/28/2020	0.025	0.13	0.034	0.034	0.037	
1/29/2020						0.11
3/9/2020	0.023	0.094				
3/10/2020			0.043	0.031	0.035	0.13
9/16/2020	0.025	0.078	0.037	0.028	0.034	
9/17/2020						0.11
3/23/2021	0.02	0.13		0.028	0.031	
3/24/2021			0.032			0.1
8/23/2021	0.024	0.096				
8/24/2021			0.027	0.026	0.026	
8/25/2021						0.11
2/22/2022	0.022	0.13	0.038	0.03	0.034	0.11
8/2/2022	0.018	0.12	0.031	0.034	0.023	
8/3/2022						0.11

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.039	0.0364
5/6/2016		0.0605	0.151		
6/21/2016	0.0439	0.0613	0.174	0.0152	0.0386
8/15/2016				0.015	0.03
8/16/2016	0.041	0.052	0.13		
9/28/2016				0.014	0.034
9/29/2016	0.052	0.053	0.14		
11/16/2016	0.044	0.056	0.14	0.013	0.034
1/17/2017			0.16	0.014	0.038
1/18/2017	0.056	0.06			
3/2/2017	0.04	0.056	0.15	0.013	0.037
4/18/2017			0.14	0.011	0.04
4/19/2017		0.051			
4/25/2017	0.042				
7/13/2017	0.043				
3/29/2018	0.061			0.01	
3/30/2018		0.049	0.13		0.041
6/12/2018	0.063				
6/13/2018		0.05	0.14	0.0098	0.038
10/10/2018	0.071	0.046	0.13	0.011	0.035
1/29/2019	0.06	0.0496	0.138	<0.0025	0.0344
3/26/2019	0.06	0.048	0.13	0.0086	0.032
9/10/2019	0.073	0.053	0.15	0.012	0.035
1/28/2020	0.069			0.012	
1/29/2020		0.051	0.15		0.033
3/10/2020	0.056	0.049	0.15	0.013	0.036
9/16/2020	0.1	0.048			
9/17/2020			0.16	0.0091 (J)	0.028
3/24/2021	0.056	0.049	0.16	0.011	0.054
8/24/2021		0.047	0.16		
8/25/2021	0.051			0.013	0.031
2/22/2022	0.067				
2/23/2022		0.046	0.17	0.014	0.036
8/2/2022	0.057				
8/3/2022			0.15	0.018	
8/4/2022		0.042			0.043

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.0025		<0.0025	<0.0025		
5/6/2016						<0.0025
6/20/2016	3.3E-05 (J)	<0.0025	<0.0025			
6/21/2016				<0.0025		<0.0025
8/15/2016	<0.0025	<0.0025	<0.0025	<0.0025		
8/16/2016						<0.0025
9/28/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/16/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
1/16/2017	<0.0025					
1/17/2017		<0.0025	<0.0025	<0.0025		
1/19/2017						<0.0025
3/2/2017	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
4/18/2017	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
7/13/2017		<0.0025				
3/29/2018	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
6/12/2018	<0.0025	<0.0025	<0.0025			
6/13/2018				<0.0025		<0.0025
10/9/2018	<0.0025	<0.0025	<0.0025			
10/10/2018				<0.0025		<0.0025
1/28/2019	<0.0025	<0.0025				
1/29/2019			<0.0025	<0.0025	<0.0025	<0.0025
1/28/2020	<0.0025	0.0004 (J)	<0.0025	<0.0025	<0.0025	
1/29/2020						0.00018 (J)
3/9/2020	0.00045 (J)	0.00018 (J)				
3/10/2020			<0.0025	<0.0025	<0.0025	<0.0025
9/16/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
9/17/2020						<0.0025
3/23/2021	0.00022 (J)	<0.0025		<0.0025	<0.0025	
3/24/2021			<0.0025			<0.0025
8/23/2021	<0.0025	<0.0025				
8/24/2021			<0.0025	<0.0025	<0.0025	
8/25/2021						<0.0025
2/22/2022	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
8/2/2022	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
8/3/2022						<0.0025



# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0025	<0.0025
5/6/2016		<0.0025	<0.0025		
6/21/2016	<0.0025	<0.0025	<0.0025	<0.0025	0.0004 (J)
8/15/2016				<0.0025	0.00053 (J)
8/16/2016	<0.0025	<0.0025	<0.0025		
9/28/2016				<0.0025	0.00049 (J)
9/29/2016	<0.0025	<0.0025	<0.0025		
11/16/2016	<0.0025	<0.0025	<0.0025	<0.0025	0.0004 (J)
1/17/2017			<0.0025	<0.0025	0.00084 (J)
1/18/2017	<0.0025	<0.0025			
3/2/2017	<0.0025	<0.0025	<0.0025	<0.0025	0.00068 (J)
4/18/2017			<0.0025	<0.0025	0.00067 (J)
4/19/2017		<0.0025			
4/25/2017	<0.0025				
7/13/2017	<0.0025				
3/29/2018	<0.0025			<0.0025	
3/30/2018		<0.0025	<0.0025		0.0015 (J)
6/12/2018	<0.0025				
6/13/2018		<0.0025	<0.0025	<0.0025	0.0012 (J)
10/10/2018	<0.0025	<0.0025	<0.0025	<0.0025	0.0016 (J)
1/29/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
1/28/2020	<0.0025			<0.0025	
1/29/2020		<0.0025	0.00031 (J)		0.0019
3/10/2020	<0.0025	<0.0025	<0.0025	<0.0025	0.0013 (J)
9/16/2020	<0.0025	<0.0025			
9/17/2020			<0.0025	<0.0025	0.0019 (J)
3/24/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
8/24/2021		<0.0025	<0.0025		
8/25/2021	<0.0025			<0.0025	0.0015 (J)
2/22/2022	<0.0025				
2/23/2022		<0.0025	<0.0025	<0.0025	0.0014 (J)
8/2/2022	<0.0025				
8/3/2022			<0.0025	<0.0025	
8/4/2022		<0.0025			0.00064 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.08		<0.08	0.157		
5/6/2016						0.567
6/20/2016	0.011 (J)	0.017 (J)	0.013 (J)			
6/21/2016				0.124		1.55
8/15/2016	0.022 (J)	0.032 (J)	0.023 (J)	0.18		
8/16/2016						0.85
9/28/2016	0.023 (J)	0.021 (J)	<0.08	0.17		0.7
11/16/2016	<0.08	<0.08	<0.08	0.17		0.88
1/16/2017	0.021 (J)					
1/17/2017		<0.08	<0.08	0.17		
1/19/2017						1.5
3/2/2017	<0.08	<0.08	<0.08	0.14		0.89
4/18/2017	<0.08	<0.08	<0.08	0.14		1.1
7/13/2017		<0.08				
10/10/2017	0.021 (J)	0.025 (J)	<0.08	0.12		1.9
6/12/2018	<0.08	<0.08	<0.08			
6/13/2018				0.11		1.2
10/9/2018	<0.08	<0.08	<0.08			
10/10/2018				0.096 (J)		1.2
1/29/2019					<0.08	
3/25/2019	<0.08	<0.08	<0.08		<0.08	
3/26/2019				0.079 (J)		1.3
9/10/2019	<0.08	<0.08	<0.08	0.097	0.04 (J)	1.5
3/9/2020	0.045 (J)	<0.08				
3/10/2020			<0.08	0.051 (J)	<0.08	1.9
9/16/2020	<0.08	0.045 (J)	<0.08	0.041 (J)	0.04 (J)	
9/17/2020						1.8
3/23/2021	<0.08	0.047 (J)		<0.08	<0.08	
3/24/2021			<0.08			0.57
8/23/2021	<0.08	0.043 (J)				
8/24/2021			<0.08	<0.08	<0.08	
8/25/2021						1.7
2/22/2022	<0.08	<0.08	<0.08	<0.08	<0.08	1.7
8/2/2022	<0.08	<0.08	<0.08	<0.08	<0.08	
8/3/2022						1.7

# Time Series

Constituent: Boron (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.855	0.976
5/6/2016		3.78	0.926		
6/21/2016	0.0201 (J)	3.1	0.792	1.15	0.862
8/15/2016				1.3	0.8
8/16/2016	0.055	2.8	1		
9/28/2016				1.3	0.8
9/29/2016	<0.08	3.1	1		
11/16/2016	0.055	3.9	1.2	1.3	0.98
1/17/2017			1.3	1.3	1.6
1/18/2017	0.097	3.7			
3/2/2017	0.064	3.3	1.3	1.3	1.8
4/18/2017			1.8	1.5	2.4
4/19/2017		3.7			
4/25/2017	<0.08				
7/13/2017	<0.08				
10/10/2017	<0.08	3.4	1.7	1.4	4.2
6/12/2018	<0.08				
6/13/2018		3	1.6	1.4	4.9
10/10/2018	0.034 (J)	3	1.6	1.4	5.1
3/26/2019	0.032 (J)	2.6	1.5	1.5	5.1
9/10/2019	0.06 (J)	2.4	1.5	1.5	4.8
3/10/2020	<0.08	2.3	1.3	1.4	4
9/16/2020	<0.08	2.1			
9/17/2020			1.2	1.4	4.4
3/24/2021	<0.08	2.4	1.2	1.5	3.6
8/24/2021		2.2	0.97		
8/25/2021	0.11			1.6	4.2
2/22/2022	<0.08				
2/23/2022		2	0.83	2.1	4.1
8/2/2022	0.071 (J)				
8/3/2022			0.76	2.3	
8/4/2022		1.9			4.3

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.0025		<0.0025	<0.0025		
5/6/2016						0.000126 (J)
6/20/2016	<0.0025	<0.0025	<0.0025			
6/21/2016				<0.0025		0.0005 (J)
8/15/2016	<0.0025	<0.0025	<0.0025	<0.0025		
8/16/2016						<0.0025
9/28/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/16/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
1/16/2017	<0.0025					
1/17/2017		<0.0025	<0.0025	<0.0025		
1/19/2017						<0.0025
3/2/2017	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
4/18/2017	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
7/13/2017		<0.0025				
3/29/2018	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
6/12/2018	<0.0025	<0.0025	<0.0025			
6/13/2018				<0.0025		<0.0025
10/9/2018	<0.0025	<0.0025	<0.0025			
10/10/2018				<0.0025		<0.0025
1/28/2019	<0.0025	<0.0025				
1/29/2019			<0.0025	<0.0025	<0.0025	<0.0025
3/25/2019	<0.0025	<0.0025	<0.0025		<0.0025	
3/26/2019				<0.0025		<0.0025
9/10/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.00017 (J)
1/28/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
1/29/2020						<0.0025
3/9/2020	0.00023 (J)	<0.0025				
3/10/2020			<0.0025	<0.0025	<0.0025	<0.0025
9/16/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
9/17/2020						<0.0025
3/23/2021	<0.0025	<0.0025		<0.0025	<0.0025	
3/24/2021			<0.0025			<0.0025
8/23/2021	<0.0025	<0.0025				
8/24/2021			<0.0025	<0.0025	<0.0025	
8/25/2021						<0.0025
2/22/2022	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
8/2/2022	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
8/3/2022						8.5E-05 (J)

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0025	0.000784 (J)
5/6/2016		0.00166	<0.0025		
6/21/2016	<0.0025	0.0008 (J)	<0.0025	<0.0025	0.0003 (J)
8/15/2016				<0.0025	<0.0025
8/16/2016	<0.0025	0.0034	<0.0025		
9/28/2016				<0.0025	<0.0025
9/29/2016	<0.0025	0.0027	<0.0025		
11/16/2016	<0.0025	0.0022 (J)	<0.0025	<0.0025	<0.0025
1/17/2017			<0.0025	<0.0025	<0.0025
1/18/2017	<0.0025	0.008			
3/2/2017	<0.0025	0.005	<0.0025	<0.0025	<0.0025
4/18/2017			<0.0025	<0.0025	0.00044 (J)
4/19/2017		0.0011 (J)			
4/25/2017	<0.0025				
7/13/2017	<0.0025				
3/29/2018	<0.0025			<0.0025	
3/30/2018		0.0016 (J)	<0.0025		0.00058 (J)
6/12/2018	<0.0025				
6/13/2018		0.0016 (J)	<0.0025	<0.0025	0.00076 (J)
10/10/2018	<0.0025	0.001 (J)	<0.0025	<0.0025	0.00035 (J)
1/29/2019	<0.0025	0.00315	<0.0025	<0.0025	<0.0025
3/26/2019	<0.0025	0.0019 (J)	<0.0025	<0.0025	0.0005 (J)
9/10/2019	<0.0025	0.0011	<0.0025	<0.0025	0.00079 (J)
1/28/2020	<0.0025			<0.0025	
1/29/2020		0.0054	<0.0025		0.0009 (J)
3/10/2020	<0.0025	0.0011 (J)	<0.0025	<0.0025	0.0011 (J)
9/16/2020	<0.0025	0.00053 (J)			
9/17/2020			<0.0025	0.00023 (J)	0.00072 (J)
3/24/2021	<0.0025	0.0022 (J)	<0.0025	<0.0025	0.001 (J)
8/24/2021		0.00054 (J)	<0.0025		
8/25/2021	<0.0025			<0.0025	0.0046
2/22/2022	<0.0025				
2/23/2022		0.0039	<0.0025	<0.0025	0.0014 (J)
8/2/2022	<0.0025				
8/3/2022			<0.0025	0.00041 (J)	
8/4/2022		0.0002 (J)			0.0037

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	8.83		27	105		
5/6/2016						92.5
6/20/2016	8.1	35.5	29.4			
6/21/2016				91.2		119
8/15/2016	6.1	34	26	94		
8/16/2016						84
9/28/2016	7.2	38	31	110		92
11/16/2016	5.2	33	26	98		83
1/16/2017	3.8					
1/17/2017		34	29	100		
1/19/2017						110
3/2/2017	5.4	35	28	100		89
4/18/2017	5	33	27	110		100
7/13/2017		30				
10/10/2017	4.8	39	31	110		120
6/12/2018	4.8	26	25			
6/13/2018				100		100
10/9/2018	4.5	29	29			
10/10/2018				100		100
1/29/2019					95.1	
3/25/2019	4.6	37	27		89	
3/26/2019				100		100
9/10/2019	4.9	36	27	110	86	110
3/9/2020	4	32				
3/10/2020			29	100	90	120
9/16/2020	6.8	30	28	100	93	
9/17/2020						110
3/23/2021	4	42		110	97	
3/24/2021			28			100
8/23/2021	5.8	34				
8/24/2021			27	100	83	
8/25/2021						120
2/22/2022	3.3	36	25	97	90	100
8/2/2022	3.1	36	26	110	94	
8/3/2022						110

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				45	41.2
5/6/2016		131	109		
6/21/2016	25.5	119	99.7	52.8	44.7
8/15/2016				50	27
8/16/2016	25	120	97		
9/28/2016				58	32
9/29/2016	30	140	100		
11/16/2016	26	120	94	50	27
1/17/2017			100	52	32
1/18/2017	32	130			
3/2/2017	26	120	99	52	33
4/18/2017			120	56	59
4/19/2017		120			
4/25/2017	26				
7/13/2017	26				
10/10/2017	28	130	110	56	74
6/12/2018	30				
6/13/2018		120	100	51	84
10/10/2018	35	120	96	51	87
3/26/2019	33	110	99	52	96
9/10/2019	33	110	99	53	97
3/10/2020	30	110	110	55	100
9/16/2020	25	110			
9/17/2020			110	48	100
3/24/2021	32	120	120	51	120
8/24/2021		110	110		
8/25/2021	31			59	96
2/22/2022	35				
2/23/2022		100	120	61	97
8/2/2022	34				
8/3/2022			110	66	
8/4/2022		98			100

# Time Series

Constituent: Chloride (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	7.35		6.51	9.67		
5/6/2016						13.2
6/20/2016	7	4.3	5.9			
6/21/2016				9.2		15
8/15/2016	7.5	4.1	6.4	10		
8/16/2016						14
9/28/2016	7	3.9	6.1	10		14
11/16/2016	7.5	4.1	6.1	10		14
1/16/2017	7.7					
1/17/2017		3.9	5.7	9.4		
1/19/2017						14
3/2/2017	6.9	3.5	5.3	8.6		13
4/18/2017	6.8	3.7	5.3	8.9		13
7/13/2017		4.2				
10/10/2017	6.9	3.4	5.3	8.3		14
6/12/2018	6.7	4.6	5.1			
6/13/2018				7		13
10/9/2018	7.1	4.5	5.6			
10/10/2018				6.9		14
1/29/2019					4.51	
3/25/2019	6.8	3.4	4.7		4.4	
3/26/2019				5.8		13
9/10/2019	7	3.5	5.1	6	4.2	13
3/9/2020	7.4	4.5				
3/10/2020			5.4	5.1	4	14
9/16/2020	7	4.6	5.2	4.3	3.7	
9/17/2020						14
3/23/2021	7.8	3.8		4	4.1	
3/24/2021			5.5			14
8/23/2021	7.3	4.4				
8/24/2021			5.5	4	3.9	
8/25/2021						14
2/22/2022	7.1	3.1	5.1	4	3.3	13
8/2/2022	7.4	3.4	3.5	2.6	2.8	
8/3/2022						13



# Time Series

Constituent: Chloride (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				13	10.1
5/6/2016		41	12.5		
6/21/2016	4.4	20	13	13	10
8/15/2016				14	9.5
8/16/2016	4.6	20	13		
9/28/2016				13	9.2
9/29/2016	4.4	19	13		
11/16/2016	4.5	20	14	13	9.5
1/17/2017			14	13	10
1/18/2017	4.2	18			
3/2/2017	3.9	18	13	13	9.3
4/18/2017			13	12	10
4/19/2017		17			
4/25/2017	4				
7/13/2017	4				
10/10/2017	4	16	14	12	11
6/12/2018	4				
6/13/2018		16	13	12	11
10/10/2018	4.2	15	14	12	10
3/26/2019	3.8	14	14	11	11
9/10/2019	4.1	13	13	9.9	10
3/10/2020	4.1	12	15	10	12
9/16/2020	5.1	12			
9/17/2020			14	9.6	10
3/24/2021	5.7	13	14	10	18
8/24/2021		13	14		
8/25/2021	4.9			9.9	11
2/22/2022	4				
2/23/2022		13	14	9.8	11
8/2/2022	4.9				
8/3/2022			13	11	
8/4/2022		12			13

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.00249 (J)		<0.002	<0.002		
5/6/2016						<0.002
6/20/2016	0.0026 (J)	0.00066 (J)	0.00024 (J)			
6/21/2016				<0.002		<0.002
8/15/2016	0.0029	<0.002	<0.002	<0.002		
8/16/2016						<0.002
9/28/2016	0.0027	<0.002	<0.002	<0.002		<0.002
11/16/2016	0.0026	<0.002	<0.002	<0.002		<0.002
1/16/2017	0.0029					
1/17/2017		<0.002	<0.002	<0.002		
1/19/2017						<0.002
3/2/2017	0.0063	0.003	0.0032	0.0032		0.0036
4/18/2017	0.0031	<0.002	<0.002	<0.002		<0.002
7/13/2017		<0.002				
3/29/2018	0.0039	<0.002	<0.002	<0.002		<0.002
6/12/2018	0.0038	<0.002	<0.002			
6/13/2018				<0.002		<0.002
10/9/2018	0.0037	<0.002	<0.002			
10/10/2018				<0.002		<0.002
1/28/2019	0.00545	<0.002				
1/29/2019			<0.002	<0.002	<0.002	<0.002
1/28/2020	0.0044	<0.002	<0.002	<0.002	<0.002	
1/29/2020						<0.002
3/9/2020	0.0042	<0.002				
3/10/2020			<0.002	<0.002	<0.002	<0.002
9/16/2020	0.0039	<0.002	<0.002	<0.002	<0.002	
9/17/2020						<0.002
3/23/2021	0.0043	<0.002		<0.002	<0.002	
3/24/2021			<0.002			<0.002
8/23/2021	0.0045	<0.002				
8/24/2021			<0.002	<0.002	<0.002	
8/25/2021						<0.002
2/22/2022	0.0039	<0.002	<0.002	<0.002	<0.002	<0.002
8/2/2022	0.003	<0.002	<0.002	<0.002	<0.002	
8/3/2022						<0.002

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.002	<0.002
5/6/2016		<0.002	<0.002		
6/21/2016	<0.002	<0.002	<0.002	<0.002	<0.002
8/15/2016				<0.002	<0.002
8/16/2016	<0.002	<0.002	<0.002		
9/28/2016				<0.002	<0.002
9/29/2016	<0.002	<0.002	<0.002		
11/16/2016	<0.002	<0.002	<0.002	<0.002	<0.002
1/17/2017			<0.002	<0.002	<0.002
1/18/2017	<0.002	<0.002			
3/2/2017	0.0032	0.0033	0.003	0.0034	0.0031
4/18/2017			<0.002	<0.002	<0.002
4/19/2017		<0.002			
4/25/2017	<0.002				
7/13/2017	<0.002				
3/29/2018	<0.002			<0.002	
3/30/2018		<0.002	<0.002		<0.002
6/12/2018	<0.002				
6/13/2018		<0.002	<0.002	<0.002	<0.002
10/10/2018	<0.002	<0.002	<0.002	<0.002	<0.002
1/29/2019	<0.002	<0.002	<0.002	<0.002	<0.002
1/28/2020	<0.002			0.0015 (J)	
1/29/2020		<0.002	<0.002		<0.002
3/10/2020	<0.002	<0.002	<0.002	<0.002	<0.002
9/16/2020	0.029	<0.002			
9/17/2020			<0.002	<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002	<0.002	<0.002
8/24/2021		<0.002	<0.002		
8/25/2021	<0.002			<0.002	<0.002
2/22/2022	<0.002				
2/23/2022		<0.002	<0.002	<0.002	<0.002
8/2/2022	<0.002				
8/3/2022			<0.002	<0.002	
8/4/2022		<0.002			<0.002

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.0025		<0.0025	<0.0025		
5/6/2016						<0.0025
6/20/2016	0.00018 (J)	3.9E-05 (J)	1.2E-05 (J)			
6/21/2016				0.0003 (J)		0.0012 (J)
8/15/2016	<0.0025	<0.0025	<0.0025	0.00049 (J)		
8/16/2016						0.00047 (J)
9/28/2016	<0.0025	<0.0025	<0.0025	0.00043 (J)		0.00058 (J)
11/16/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
1/16/2017	<0.0025					
1/17/2017		<0.0025	<0.0025	<0.0025		
1/19/2017						0.0004 (J)
3/2/2017	<0.0025	<0.0025	<0.0025	0.00046 (J)		<0.0025
4/18/2017	<0.0025	<0.0025	<0.0025	0.00044 (J)		<0.0025
7/13/2017		<0.0025				
3/29/2018	<0.0025	<0.0025	<0.0025	0.00065 (J)		<0.0025
6/12/2018	<0.0025	<0.0025	<0.0025			
6/13/2018				<0.0025		<0.0025
10/9/2018	<0.0025	<0.0025	<0.0025			
10/10/2018				0.00051 (J)		<0.0025
1/28/2019	<0.0025	<0.0025				
1/29/2019			<0.0025	<0.0025	<0.0025	<0.0025
3/25/2019	<0.0025	<0.0025	<0.0025		<0.0025	
3/26/2019				<0.0025		<0.0025
9/10/2019	0.00011 (J)	<0.0025	<0.0025	0.00037 (J)	0.0002 (J)	0.00032 (J)
1/28/2020	<0.0025	<0.0025	<0.0025	0.00041 (J)	0.00024 (J)	
1/29/2020						0.00027 (J)
3/9/2020	<0.0025	<0.0025				
3/10/2020			<0.0025	0.00038 (J)	0.00032 (J)	<0.0025
9/16/2020	<0.0025	<0.0025	<0.0025	<0.0025	0.00038 (J)	
9/17/2020						0.0002 (J)
3/23/2021	0.00014 (J)	<0.0025		0.00025 (J)	0.00036 (J)	
3/24/2021			<0.0025			<0.0025
8/23/2021	<0.0025	<0.0025				
8/24/2021			<0.0025	<0.0025	0.0017 (J)	
8/25/2021						0.00018 (J)
2/22/2022	<0.0025	<0.0025	<0.0025	<0.0025	0.00049 (J)	<0.0025
8/2/2022	<0.0025	<0.0025	0.012 (o)	0.0003 (J)	0.00034 (J)	
8/3/2022						<0.0025

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.0036 (J)	0.00359 (J)
5/6/2016		0.00311 (J)	<0.0025		
6/21/2016	<0.0025	0.0031 (J)	0.0006 (J)	0.0097 (J)	0.0033 (J)
8/15/2016				0.0098	0.0038
8/16/2016	<0.0025	0.0034	0.00064 (J)		
9/28/2016				0.0095	0.0043
9/29/2016	<0.0025	0.0032	0.00054 (J)		
11/16/2016	<0.0025	0.0032	0.00041 (J)	0.0094	0.004
1/17/2017			0.00051 (J)	0.0099	0.0051
1/18/2017	<0.0025	0.0032			
3/2/2017	<0.0025	0.0042	0.00064 (J)	0.013	0.0064
4/18/2017			0.00057 (J)	0.0086	0.005
4/19/2017		0.0035			
4/25/2017	<0.0025				
7/13/2017	<0.0025				
3/29/2018	<0.0025			0.0088	
3/30/2018		0.0037	0.00068 (J)		0.015
6/12/2018	<0.0025				
6/13/2018		0.0035	0.00048 (J)	0.0093	0.014
10/10/2018	<0.0025	0.0034	0.00063 (J)	0.012	0.018
1/29/2019	<0.0025	0.00293	<0.0025	0.0103	0.0159
3/26/2019	<0.0025	0.003	<0.0025	0.009	0.02
9/10/2019	0.00016 (J)	0.0027	0.00065	0.011	0.019
1/28/2020	<0.0025			0.008	
1/29/2020		0.003	0.00067		0.025
3/10/2020	<0.0025	0.0024 (J)	0.0005 (J)	0.0081	0.017
9/16/2020	0.0015 (J)	0.002 (J)			
9/17/2020			0.00053 (J)	0.0098	0.024
3/24/2021	<0.0025	0.0019 (J)	0.00053 (J)	0.0063	0.002 (J)
8/24/2021		0.0018 (J)	0.00034 (J)		
8/25/2021	<0.0025			0.0032	0.021
2/22/2022	<0.0025				
2/23/2022		0.0016 (J)	0.0012 (J)	0.007	0.015
8/2/2022	<0.0025				
8/3/2022			0.00051 (J)	0.0044	
8/4/2022		0.0013 (J)			0.0092

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.879		0.48	0.694		
5/6/2016						1.07
6/20/2016	0.305 (U)	0.556 (U)	0.184			
6/21/2016				0.511 (U)		2.01
8/15/2016	0.577	0.72	0.577	0.467		
8/16/2016						1.12
9/28/2016	0.77	0.521 (U)	0.107 (U)	0.926		1.09
11/16/2016	0.427 (U)	0.322 (U)	0.333 (U)	0.863		1.58
1/16/2017	1.1					
1/17/2017		1.26	0.511 (U)	0.82		
1/19/2017						1.64
3/2/2017	1.01	0.47	0.105 (U)	0.236 (U)		1.08
4/18/2017	0.635	0.233 (U)	0.279 (U)	0.316 (U)		1.23
7/13/2017		0.679				
3/29/2018	0.799	0.723	0.37	0.6		1.21
6/12/2018	0.313 (U)	0.105 (U)	0.133 (U)			
6/13/2018				0.349 (U)		1.09
10/9/2018	1.11	0.65	0.85			
10/10/2018				1.01		1.95
1/28/2019	0.872	0.478				
1/29/2019			0.275 (U)	0.591	0.874	1.11
3/25/2019	0.526	0.717	0.629		0.646	
3/26/2019				0.4		1
9/10/2019	0.612	0.377 (U)	0.354 (U)	0.481	0.988	1.26
1/28/2020	0.322 (U)	0.528	0.0677 (U)	0.374 (U)	0.0609 (U)	
1/29/2020						1.39
3/9/2020	0.761	0.00483 (U)				
3/10/2020			0.0594 (U)	0.41 (U)	0.528	1.4
9/16/2020	0.969	0.583	0.821	-0.0651 (U)	1.13	
9/17/2020						1.79
12/7/2020				0.979		
12/8/2020						1.87
3/23/2021	0.657	0.409 (U)		0.542	0.612	
3/24/2021			0.206 (U)			1.81
8/23/2021	0.752	1.19				
8/24/2021			0.521 (U)	0.678	0.596	
8/25/2021						2.12
2/22/2022	1.06	0.837	0.511	0.594	0.728	1.85
8/2/2022	0.239 (U)	0.967	0.35 (U)	0.683	0.42 (U)	
8/3/2022						2.2

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.75	1.21
5/6/2016		0.633	1.41		
6/21/2016	0.292 (U)	1.19 (U)	1.71	1.01	0.895 (U)
8/15/2016				1.3	1.64
8/16/2016	0.232 (U)	0.516	1.75		
9/28/2016				1.06	2.17
9/29/2016	1.11	0.665	1.43		
11/16/2016	0.798	0.694	1.9	0.855	1.49
1/17/2017			1.9	1.59	1.75
1/18/2017	0.302 (U)	0.688			
3/2/2017	0.437	0.484	1.37	1.4	1.03
4/18/2017			1.42	0.684	1.83
4/19/2017		0.599			
4/25/2017	0.391				
7/13/2017	0.47				
3/29/2018	0.736			0.822	
3/30/2018		0.677	1.43		2.15
6/12/2018	0.438				
6/13/2018		0.272 (U)	1.27	0.716	1.51
10/10/2018	0.371	0.336	1.54	1.51	2.72
1/29/2019	0.639	0.719	1.34	1.7	1.93
3/26/2019	0.607	0.41 (U)	1.25	0.784	1.79
9/10/2019	0.939	0.548	1.6	0.958	1.78
1/28/2020	0.465			1.38	
1/29/2020		0.0985 (U)	1.44		1.61
3/10/2020	0.34 (U)	0.589	1.32	0.903	1.95
9/16/2020	1.09	1.11			
9/17/2020			0.666 (U)	1.28	1.56
12/8/2020			1.65		
3/24/2021	0.434 (U)	0.625	1.58	1.2	0.636
8/24/2021		0.313 (U)	1.65		
8/25/2021	0.563			0.767	2.13
2/22/2022	0.888				
2/23/2022		0.598	1.47	1.42	2.62
8/2/2022	1.08				
8/3/2022			2.56	1.11	
8/4/2022		0.632			1.24

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	0.046 (J)		0.132 (J)	0.091 (J)		
5/6/2016						0.28 (J)
6/20/2016	<0.1	0.06 (J)	0.05 (J)			
6/21/2016				0.08 (J)		0.36
8/15/2016	<0.1	0.1 (J)	0.1 (J)	<0.1		
8/16/2016						0.27
9/28/2016	<0.1	0.097 (J)	0.11 (J)	0.084 (J)		0.26
11/16/2016	<0.1	0.12 (J)	0.093 (J)	0.084 (J)		0.24
1/16/2017	<0.1					
1/17/2017		0.11 (J)	0.095 (J)	0.099 (J)		
1/19/2017						0.22
3/2/2017	0.12 (J)	0.18 (J)	0.16 (J)	0.15 (J)		0.27
4/18/2017	<0.1	0.11 (J)	<0.1	<0.1		0.2
7/13/2017		0.12 (J)				
10/10/2017	<0.1	0.086 (J)	<0.1	<0.1		0.18 (J)
3/29/2018	<0.1	<0.1	0.084 (J)	<0.1		0.16 (J)
6/12/2018	<0.1	0.16 (J)	<0.1			
6/13/2018				<0.1		0.14 (J)
10/9/2018	<0.1	0.16 (J)	0.086 (J)			
10/10/2018				<0.1		0.17 (J)
1/29/2019					<0.1	
3/25/2019	<0.1	0.087 (J)	0.072 (J)		0.067 (J)	
3/26/2019				0.065 (J)		0.16
9/10/2019	0.044 (J)	0.075 (J)	0.068 (J)	0.076 (J)	0.052 (J)	0.098 (J)
3/9/2020	0.061 (J)	0.19				
3/10/2020			0.055 (J)	0.045 (J)	0.048 (J)	0.086 (J)
9/16/2020	0.042 (J)	0.18	0.08 (J)	0.076 (J)	0.078 (J)	
9/17/2020						0.15
3/23/2021	0.038 (J)	0.081 (J)		0.082 (J)	0.096 (J)	
3/24/2021			0.091 (J)			0.27
8/23/2021	0.048 (J)	0.12				
8/24/2021			0.1	0.1	0.11	
8/25/2021						0.097 (J)
2/22/2022	<0.1	<0.1	<0.1	0.034 (J)	<0.1	0.047 (J)
8/2/2022	<0.1	0.065 (J)	0.066 (J)	0.055 (J)	0.052 (J)	
8/3/2022						0.12



# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.394	0.103 (J)
5/6/2016		0.088 (J)	0.086 (J)		
6/21/2016	0.14 (J)	0.19 (J)	0.23 (J)	0.49	0.1 (J)
8/15/2016				0.44	0.11 (J)
8/16/2016	0.29	0.087 (J)	<0.1		
9/28/2016				0.4	0.1 (J)
9/29/2016	0.26	<0.1	0.082 (J)		
11/16/2016	0.25	<0.1	0.087 (J)	0.36	0.091 (J)
1/17/2017			0.086 (J)	0.2	<0.1
1/18/2017	0.26	<0.1			
3/2/2017	0.28	0.15 (J)	0.15 (J)	0.36	0.16 (J)
4/18/2017			<0.1	0.29	<0.1
4/19/2017		<0.1			
4/25/2017	0.25				
7/13/2017	0.21				
10/10/2017	0.22	<0.1	<0.1	0.28	<0.1
3/29/2018	0.23			0.23	
3/30/2018		<0.1	<0.1		0.088 (J)
6/12/2018	0.23				
6/13/2018		<0.1	<0.1	0.2	0.15 (J)
10/10/2018	0.25	0.085 (J)	<0.1	0.23	0.11 (J)
3/26/2019	0.22	0.076 (J)	0.072 (J)	0.19 (J)	0.088 (J)
9/10/2019	0.2	0.07 (J)	0.073 (J)	0.15	0.083 (J)
3/10/2020	0.15	0.05 (J)	0.058 (J)	0.18	0.084 (J)
9/16/2020	0.26	0.076 (J)			
9/17/2020			0.083 (J)	0.25	0.11
3/24/2021	0.27	0.11	0.092 (J)	0.35	0.11
8/24/2021		0.095 (J)	0.11		
8/25/2021	0.19			0.15	0.038 (J)
2/22/2022	0.093 (J)				
2/23/2022		0.075 (J)	0.086 (J)	0.22	0.05 (J)
8/2/2022	0.074 (J)				
8/3/2022			0.079 (J)	0.2	
8/4/2022		0.072 (J)			0.087 (J)

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.001		<0.001	<0.001		
5/6/2016						<0.001
6/20/2016	<0.001	8.7E-05 (J)	<0.001			
6/21/2016				<0.001		<0.001
8/15/2016	<0.001	<0.001	<0.001	<0.001		
8/16/2016						<0.001
9/28/2016	<0.001	<0.001	<0.001	<0.001		<0.001
11/16/2016	<0.001	<0.001	<0.001	<0.001		<0.001
1/16/2017	<0.001					
1/17/2017		<0.001	<0.001	<0.001		
1/19/2017						<0.001
3/2/2017	<0.001	<0.001	<0.001	<0.001		<0.001
4/18/2017	<0.001	<0.001	<0.001	<0.001		<0.001
7/13/2017		<0.001				
3/29/2018	<0.001	<0.001	<0.001	<0.001		<0.001
1/28/2019	<0.001	<0.001				
1/29/2019			<0.001	<0.001	<0.001	<0.001
1/28/2020	<0.001	0.00016 (J)	0.00018 (J)	<0.001	<0.001	
1/29/2020						<0.001
3/9/2020	<0.001	<0.001				
3/10/2020			<0.001	<0.001	<0.001	<0.001
9/16/2020	<0.001	<0.001	<0.001	<0.001	<0.001	
9/17/2020						<0.001
3/23/2021	0.00013 (J)	0.00013 (J)		<0.001	<0.001	
3/24/2021			<0.001			<0.001
8/23/2021	<0.001	<0.001				
8/24/2021			<0.001	<0.001	<0.001	
8/25/2021						<0.001
2/22/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
8/3/2022						<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.001	<0.001
5/6/2016		<0.001	<0.001		
6/21/2016	0.0001 (J)	<0.001	<0.001	0.0003 (J)	<0.001
8/15/2016				<0.001	<0.001
8/16/2016	<0.001	<0.001	<0.001		
9/28/2016				<0.001	<0.001
9/29/2016	<0.001	<0.001	<0.001		
11/16/2016	<0.001	<0.001	<0.001	<0.001	<0.001
1/17/2017			<0.001	<0.001	<0.001
1/18/2017	<0.001	<0.001			
3/2/2017	<0.001	<0.001	<0.001	<0.001	<0.001
4/18/2017			<0.001	<0.001	<0.001
4/19/2017		<0.001			
4/25/2017	<0.001				
7/13/2017	<0.001				
3/29/2018	<0.001			<0.001	
3/30/2018		<0.001	<0.001		<0.001
1/29/2019	<0.001	<0.001	<0.001	<0.001	<0.001
1/28/2020	<0.001			<0.001	
1/29/2020		<0.001	<0.001		<0.001
3/10/2020	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/2020	<0.001	<0.001			
9/17/2020			<0.001	<0.001	<0.001
3/24/2021	<0.001	<0.001	<0.001	<0.001	<0.001
8/24/2021		<0.001	<0.001		
8/25/2021	<0.001			0.00019 (J)	0.00022 (J)
2/22/2022	<0.001				
2/23/2022		<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001				
8/3/2022			<0.001	0.00021 (J)	
8/4/2022		<0.001			<0.001

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.005		<0.005	<0.005		
5/6/2016						0.0128 (J)
6/20/2016	0.0071 (J)	0.014 (J)	0.0065 (J)			
6/21/2016				<0.005		0.0102 (J)
8/15/2016	0.0065	0.02	0.0059	<0.005		
8/16/2016						0.012
9/28/2016	0.0075	0.019	0.0075	<0.005		0.012
11/16/2016	0.0081	0.021	0.0094	<0.005		0.013
1/16/2017	0.0076					
1/17/2017		0.02	0.01	<0.005		
1/19/2017						0.011
3/2/2017	0.0073	0.019	0.0076	<0.005		0.013
4/18/2017	0.006	0.016	0.008	<0.005		0.0097
7/13/2017		0.011				
3/29/2018	0.01 (J)	0.03 (J)	0.014 (J)	<0.005		0.017 (J)
6/12/2018	0.0068	0.012	0.0095			
6/13/2018				<0.005		0.0094
10/9/2018	0.0082	0.015	0.011			
10/10/2018				<0.005		0.011
1/28/2019	0.00821	0.0124				
1/29/2019			0.00987	<0.005	0.0184	0.0109
3/25/2019	0.0068	0.026	0.01		0.0052	
3/26/2019				<0.005		0.01
9/10/2019	0.011	0.026	0.011	0.0051	0.0062	0.012
1/28/2020	0.0064	0.026	0.0093	<0.005	<0.005	
1/29/2020						0.0096
3/9/2020	0.0088	0.017				
3/10/2020			0.011	<0.005	<0.005	<0.005
9/16/2020	0.0079	0.014	0.0094	<0.005	<0.005	
9/17/2020						0.0086
3/23/2021	0.0084	0.026		<0.005	<0.005	
3/24/2021			0.0097			0.013
8/23/2021	0.0075	0.018				
8/24/2021			0.0093	<0.005	<0.005	
8/25/2021						0.0096
2/22/2022	0.0079	0.027	0.011	<0.005	0.0012 (J)	0.01
8/2/2022	0.0071	0.025	0.0097	<0.005	<0.005	
8/3/2022						0.01

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.0586	0.0252 (J)
5/6/2016		<0.005	0.0113 (J)		
6/21/2016	0.0112 (J)	0.0047 (J)	0.0103 (J)	0.122	0.0228 (J)
8/15/2016				0.12	0.026
8/16/2016	0.014	0.0043 (J)	0.01		
9/28/2016				0.12	0.026
9/29/2016	0.017	0.0048 (J)	0.01		
11/16/2016	0.016	0.0058	0.014	0.13	0.031
1/17/2017			0.014	0.14	0.032
1/18/2017	0.015	0.0051			
3/2/2017	0.015	0.0061	0.013	0.13	0.031
4/18/2017			0.01	0.11	0.023
4/19/2017		0.0042 (J)			
4/25/2017	0.013				
7/13/2017	0.014				
3/29/2018	0.032 (J)			0.17 (J)	
3/30/2018		0.008 (J)	0.017 (J)		0.058 (J)
6/12/2018	0.019				
6/13/2018		0.0054	0.011	0.12	0.035
10/10/2018	0.027	0.0055	0.013	0.13	0.046
1/29/2019	0.0172	0.00537	0.0106	0.112	0.0361
3/26/2019	0.02	0.0051	0.012	0.12	0.043
9/10/2019	0.023	0.0074	0.015	0.11	0.042
1/28/2020	0.022			0.13	
1/29/2020		0.0059	0.012		0.037
3/10/2020	0.018	0.0068	0.014	0.11	0.028
9/16/2020	0.025	0.0055			
9/17/2020			0.012	0.11	0.039
3/24/2021	0.018	0.0066	0.013	0.13	0.011
8/24/2021		0.0062	0.012		
8/25/2021	0.017			0.12	0.037
2/22/2022	0.022				
2/23/2022		0.0066	0.013	0.13	0.028
8/2/2022	0.026				
8/3/2022			0.013	0.13	
8/4/2022		0.0063			0.021

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.0002		<0.0002	<0.0002		
5/6/2016						<0.0002
6/20/2016	<0.0002	<0.0002	<0.0002			
6/21/2016				<0.0002		<0.0002
8/15/2016	<0.0002	8E-05 (J)	<0.0002	<0.0002		
8/16/2016						<0.0002
9/28/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/16/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
1/16/2017	<0.0002					
1/17/2017		<0.0002	<0.0002	<0.0002		
1/19/2017						<0.0002
3/2/2017	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
4/18/2017	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
7/13/2017		<0.0002				
3/29/2018	<0.0002	8.6E-05 (J)	<0.0002	7.4E-05 (J)		<0.0002
6/12/2018	<0.0002	<0.0002	<0.0002			
6/13/2018				<0.0002		<0.0002
10/9/2018	<0.0002	<0.0002	<0.0002			
10/10/2018				<0.0002		<0.0002
1/28/2019	<0.0002	<0.0002				
1/29/2019			<0.0002	<0.0002	<0.0002	<0.0002
1/28/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
1/29/2020						<0.0002
3/9/2020	<0.0002	<0.0002				
3/10/2020			<0.0002	<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/17/2020						<0.0002
3/23/2021	<0.0002	<0.0002		<0.0002	<0.0002	
3/24/2021			<0.0002			<0.0002
8/23/2021	<0.0002	<0.0002				
8/24/2021			<0.0002	<0.0002	<0.0002	
8/25/2021						<0.0002
2/22/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/3/2022						<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0002	<0.0002
5/6/2016		<0.0002	<0.0002		
6/21/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/15/2016				<0.0002	0.00015 (J)
8/16/2016	<0.0002	7.8E-05 (J)	<0.0002		
9/28/2016				<0.0002	<0.0002
9/29/2016	<0.0002	<0.0002	<0.0002		
11/16/2016	8.6E-05 (J)	0.0001 (J)	7E-05 (J)	8E-05 (J)	0.00021
1/17/2017			<0.0002	<0.0002	7.6E-05 (J)
1/18/2017	<0.0002	<0.0002			
3/2/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4/18/2017			<0.0002	<0.0002	0.00018 (J)
4/19/2017		<0.0002			
4/25/2017	<0.0002				
7/13/2017	<0.0002				
3/29/2018	7.4E-05 (J)			<0.0002	
3/30/2018		<0.0002	<0.0002		0.00013 (J)
6/12/2018	<0.0002				
6/13/2018		<0.0002	<0.0002	<0.0002	0.00074
10/10/2018	<0.0002	<0.0002	<0.0002	<0.0002	0.00013 (J)
1/29/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/28/2020	<0.0002			<0.0002	
1/29/2020		<0.0002	<0.0002		0.00012 (J)
3/10/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002	<0.0002			
9/17/2020			<0.0002	<0.0002	0.00014 (J)
3/24/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/24/2021		<0.0002	<0.0002		
8/25/2021	<0.0002			<0.0002	0.0041
10/26/2021					<0.0002
2/22/2022	<0.0002				
2/23/2022		<0.0002	<0.0002	<0.0002	0.00028
8/2/2022	<0.0002				
8/3/2022			<0.0002	<0.0002	
8/4/2022		<0.0002			0.00068

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.015		0.0026 (J)	<0.015		
5/6/2016						0.0021 (J)
6/20/2016	0.00031 (J)	0.0052 (J)	0.0014 (J)			
6/21/2016				<0.015		0.002 (J)
8/15/2016	<0.015	0.0022 (J)	0.0013 (J)	<0.015		
8/16/2016						0.0019 (J)
9/28/2016	<0.015	0.0018 (J)	0.0012 (J)	<0.015		0.0018 (J)
11/16/2016	<0.015	<0.015	<0.015	<0.015		<0.015
1/16/2017	<0.015					
1/17/2017		0.0011 (J)	<0.015	<0.015		
1/19/2017						0.0011 (J)
3/2/2017	<0.015	<0.015	<0.015	<0.015		0.0012 (J)
4/18/2017	<0.015	<0.015	<0.015	<0.015		0.0013 (J)
7/13/2017		<0.015				
3/29/2018	<0.015	<0.015	<0.015	<0.015		0.0017 (J)
6/12/2018	0.0012 (J)	0.0029 (J)	<0.015			
6/13/2018				<0.015		0.00087 (J)
10/9/2018	<0.015	<0.015	<0.015			
10/10/2018				<0.015		<0.015
1/28/2019	<0.015	<0.015				
1/29/2019			<0.015	<0.015	<0.015	<0.015
1/28/2020	0.00064 (J)	0.00085 (J)	0.00095 (J)	<0.015	0.0014 (J)	
1/29/2020						0.0015 (J)
3/9/2020	<0.015	0.0012 (J)				
3/10/2020			0.00093 (J)	<0.015	0.0012 (J)	<0.015
9/16/2020	0.0022 (J)	0.0019 (J)	0.00079 (J)	<0.015	0.0014 (J)	
9/17/2020						0.0012 (J)
3/23/2021	<0.015	0.00093 (J)		<0.015	0.00089 (J)	
3/24/2021			0.00089 (J)			0.0029 (J)
8/23/2021	0.0016 (J)	0.0012 (J)				
8/24/2021			<0.015	<0.015	0.0011 (J)	
8/25/2021						0.00088 (J)
2/22/2022	<0.015	0.001 (J)	0.00091 (J)	<0.015	0.00078 (J)	0.0014 (J)
8/2/2022	<0.015	<0.015	<0.015	<0.015	0.0015 (J)	
8/3/2022						0.0011 (J)



# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				0.00351 (J)	<0.015
5/6/2016		<0.015	<0.015		
6/21/2016	0.002 (J)	<0.015	<0.015	<0.015	<0.015
8/15/2016				<0.015	<0.015
8/16/2016	0.0012 (J)	<0.015	<0.015		
9/28/2016				<0.015	<0.015
9/29/2016	0.0014 (J)	<0.015	<0.015		
11/16/2016	<0.015	<0.015	<0.015	<0.015	<0.015
1/17/2017			<0.015	<0.015	<0.015
1/18/2017	<0.015	<0.015			
3/2/2017	<0.015	<0.015	<0.015	<0.015	<0.015
4/18/2017			<0.015	<0.015	0.0037 (J)
4/19/2017		<0.015			
4/25/2017	<0.015				
7/13/2017	<0.015				
3/29/2018	<0.015			<0.015	
3/30/2018		<0.015	<0.015		<0.015
6/12/2018	<0.015				
6/13/2018		<0.015	<0.015	<0.015	<0.015
10/10/2018	<0.015	<0.015	<0.015	<0.015	<0.015
1/29/2019	<0.015	<0.015	<0.015	<0.015	<0.015
1/28/2020	<0.015			<0.015	
1/29/2020		<0.015	<0.015		<0.015
3/10/2020	<0.015	<0.015	<0.015	<0.015	<0.015
9/16/2020	0.0024 (J)	<0.015			
9/17/2020			<0.015	<0.015	<0.015
3/24/2021	<0.015	<0.015	<0.015	<0.015	<0.015
8/24/2021		<0.015	<0.015		
8/25/2021	<0.015			<0.015	<0.015
2/22/2022	0.00064 (J)				
2/23/2022		<0.015	<0.015	<0.015	<0.015
8/2/2022	0.00093 (J)				
8/3/2022			<0.015	<0.015	
8/4/2022		<0.015			<0.015

# Time Series

Constituent: pH (SU) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	5.94		7.4	7.13		
5/6/2016						6.64
6/20/2016	5.84 (D)	7.82	7.63			
6/21/2016				7.25		6.99
8/15/2016	5.65	7.52	7.54	7.04		
8/16/2016						6.48
9/28/2016	5.72	7.66	7.45	7.09		6.7
11/16/2016	5.65	7.51	7.39	7.6		6.66
1/16/2017	5.52					
1/17/2017		7.52	7.23	6.99		
1/19/2017						6.81
3/2/2017	5.53	7.5	7.55	6.95		6.75
4/18/2017	5.64	7.75	7.43	7.02		6.93
7/13/2017		7.72				
10/10/2017			5.62	7.27		6.99
10/11/2017	6.11	6.35				
3/29/2018	5.35	7.42	7.19	6.95		6.82
6/12/2018	6.23	8.02	7.55			
6/13/2018				7.08		7.01
10/9/2018	5.62 (D)	7.79 (D)	7.8 (D)			
10/10/2018				7.01 (D)		7.04 (D)
1/28/2019	5.49 (D)	7.4 (D)				
1/29/2019			7.63 (D)	6.55 (D)	6.93 (D)	6.87 (D)
3/25/2019	5.27 (D)	7.29 (D)	7.44 (D)		7.1 (D)	
3/26/2019				6.57 (D)		7.01 (D)
9/10/2019	5.97	7.54	7.41	6.99	7.15	7.09
1/28/2020	5.78	7.4	7.46	7.17	7.36	
1/29/2020						7.19
3/9/2020	5.46	7.58				
3/10/2020			7.3	7	7.04	7.11
9/16/2020	6.37	7.89	7.38	6.98	6.89	
9/17/2020						6.95
12/7/2020				7.2		
12/8/2020						7.41
3/23/2021	5	7.06		6.74	6.56	
3/24/2021			6.88			7.14
8/23/2021	6.16	8.12				
8/24/2021			7.78	7.11	7.28	
8/25/2021						7.27
2/22/2022	5.38	7.6	7.57	7.14	7.2	7.32
8/2/2022	5.41	7.57	7.45	7.1	7.27	
8/3/2022						7.23

# Time Series

Constituent: pH (SU) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				7.81	5.96
5/6/2016		7.41	6.85		
6/21/2016	7.61	7.41	6.98	7.2	6
8/15/2016				7.04	5.26
8/16/2016	7.17	7.33	6.73		
9/28/2016				7	5.66
9/29/2016	6.97	7.42	6.81		
11/16/2016	7.03	7.87	6.69	6.73	5.33
1/17/2017			6.77	6.61	5.24
1/18/2017	7.01	7.49			
3/2/2017	7.02	7.37	6.79	6.62	5.21
4/18/2017			6.77	6.7	5.85
4/19/2017		7.48			
4/25/2017	7.02				
7/13/2017	7.17				
10/10/2017	7.24	7.29	7	6.48	5.6
3/29/2018	6.93			6.46	
3/30/2018		7.31	6.68		5.16
6/12/2018	7.29				
6/13/2018		7.37	6.83	6.24	5.79
10/10/2018	7.12 (D)	7.41 (D)	6.69 (D)	6.12 (D)	5.15 (D)
1/29/2019	8.02 (D)	7.03 (D)	6.42 (D)	5.93 (D)	5.46 (D)
3/26/2019	7.29 (D)	6.68 (D)	5.96 (D)	5.19 (D)	7.14 (D)
9/10/2019	10.96 (o)	7.26	6.67	6.03	5.1
1/28/2020	7.25			6.61	
1/29/2020		7.3	6.68		5.76
3/10/2020	7.53	7.3	6.87	6.54	5.5
9/16/2020	11.03 (o)	7.16			
9/17/2020			6.68	6.39	5.22
12/8/2020			7.04		
3/24/2021	7.15	7.24	6.73	6.26	6.71
8/24/2021		7.42	6.92		
8/25/2021	7.44			6.85	5.26
10/26/2021					5.99
2/22/2022	7.41				
2/23/2022		7.44	6.98	6.91	6.22
8/2/2022	7.06				
8/3/2022			6.91	6.86	
8/4/2022		7.37			6.5

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.005		<0.005	<0.005		
5/6/2016						<0.005
6/20/2016	<0.005	<0.005	<0.005			
6/21/2016				<0.005		<0.005
8/15/2016	0.00062 (J)	<0.005	<0.005	<0.005		
8/16/2016						<0.005
9/28/2016	0.0003 (J)	<0.005	<0.005	<0.005		<0.005
11/16/2016	<0.005	<0.005	<0.005	<0.005		<0.005
1/16/2017	<0.005					
1/17/2017		<0.005	<0.005	<0.005		
1/19/2017						<0.005
3/2/2017	<0.005	<0.005	<0.005	<0.005		<0.005
4/18/2017	<0.005	<0.005	<0.005	<0.005		<0.005
7/13/2017		<0.005				
3/29/2018	0.00027 (J)	<0.005	<0.005	<0.005		0.0005 (J)
6/12/2018	0.00076 (J)	0.00049 (J)	<0.005			
6/13/2018				<0.005		<0.005
10/9/2018	0.00054 (J)	<0.005	<0.005			
10/10/2018				<0.005		<0.005
1/28/2019	<0.005	<0.005				
1/29/2019			<0.005	<0.005	<0.005	<0.005
1/28/2020	<0.005	<0.005	<0.005	<0.005	<0.005	
1/29/2020						<0.005
2/22/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	
8/3/2022						<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.005	<0.005
5/6/2016		<0.005	<0.005		
6/21/2016	<0.005	<0.005	<0.005	<0.005	<0.005
8/15/2016				<0.005	0.00033 (J)
8/16/2016	<0.005	<0.005	<0.005		
9/28/2016				<0.005	0.00038 (J)
9/29/2016	<0.005	<0.005	<0.005		
11/16/2016	<0.005	<0.005	<0.005	<0.005	<0.005
1/17/2017			<0.005	<0.005	<0.005
1/18/2017	<0.005	<0.005			
3/2/2017	<0.005	<0.005	<0.005	<0.005	<0.005
4/18/2017			<0.005	<0.005	0.0024
4/19/2017		<0.005			
4/25/2017	<0.005				
7/13/2017	<0.005				
3/29/2018	0.00027 (J)			0.00026 (J)	
3/30/2018		0.00045 (J)	0.00044 (J)		0.00027 (J)
6/12/2018	<0.005				
6/13/2018		<0.005	<0.005	<0.005	<0.005
10/10/2018	<0.005	<0.005	<0.005	<0.005	<0.005
1/29/2019	<0.005	<0.005	<0.005	<0.005	<0.005
1/28/2020	<0.005			<0.005	
1/29/2020		<0.005	<0.005		<0.005
2/22/2022	<0.005				
2/23/2022		<0.005	<0.005	<0.005	<0.005
8/2/2022	<0.005				
8/3/2022			<0.005	<0.005	
8/4/2022		<0.005			<0.005

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	2.46		4.47	17.8		
5/6/2016						106
6/20/2016	2.5	1	7.7			
6/21/2016				17		210
8/15/2016	1.9	0.73 (J)	7.5	20		
8/16/2016						120
9/28/2016	1.9	<1	7.8	21		110
11/16/2016	1.7	<1	6.7	20		130
1/16/2017	<1					
1/17/2017		<1	6.7	19		
1/19/2017						160
3/2/2017	1.4	<1	5.6	15		130
4/18/2017	1.3	<1	5.1	14		120
7/13/2017		1.4				
10/10/2017	1.1	0.87 (J)	4.9	11		170
6/12/2018	0.82 (J)	4.1	3.8			
6/13/2018				8.7		130
10/9/2018	0.82 (J)	2.2	6.7			
10/10/2018				8.7		140
1/29/2019					7.08	
3/25/2019	<1	<1	3.4 (J)		1.8 (J)	
3/26/2019				6.3 (J)		130
9/10/2019	1.1	1.8	4.7	5.6	0.6 (J)	140
3/9/2020	4.2	3.4				
3/10/2020			5.2	5	2.4	140
9/16/2020	0.69 (J)	3	3.2	2.7	1	
9/17/2020						150
3/23/2021	<1	1.4		3.2	1.7	
3/24/2021			3.5			120
8/23/2021	<1	3.4				
8/24/2021			3.6	3.5	3.3	
8/25/2021						140
2/22/2022	<1	1.1	3.2	5.4	2.1	150
8/2/2022	<1	0.8 (J)	2.7	2.3	2.1	
8/3/2022						140

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				116	144
5/6/2016		445	94.2		
6/21/2016	4	290	95	170	160
8/15/2016				170	120
8/16/2016	2.8	270	88		
9/28/2016				170	130
9/29/2016	<1	280	94		
11/16/2016	3	280	97	170	130
1/17/2017			100	180	150
1/18/2017	4.1	280			
3/2/2017	4.6	240	100	180	160
4/18/2017			91	160	180
4/19/2017		250			
4/25/2017	4.4				
7/13/2017	4.8				
10/10/2017	4.9	240	110	180	260
6/12/2018	4.1				
6/13/2018		220	110	180	330
10/10/2018	2.5	220	110	190	410
3/26/2019	2.9 (J)	190	110	180	420
9/10/2019	2.5	180	110	180	420
3/10/2020	7.8	170	130	170	370
9/16/2020	4.4	160			
9/17/2020			120	160	380
3/24/2021	7.1	180	130	180	280
8/24/2021		160	130		
8/25/2021	6.6			180	420
2/22/2022	4.8				
2/23/2022		180	150	260	390
8/2/2022	3.1				
8/3/2022			130	220	
8/4/2022		150			350

# Time Series

Constituent: TDS (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	78		129	281		
5/6/2016						282
6/20/2016	80	188	156			
6/21/2016				303		516
8/15/2016	58	180	160	310		
8/16/2016						360
9/28/2016	29	100	91	170		190
11/16/2016	140	270	250	340		410
1/16/2017	36					
1/17/2017		170	140	310		
1/19/2017						400
3/2/2017	78	210	170	330		360
4/18/2017	16	160	140	290		360
7/13/2017		150				
10/10/2017	78	210	190	310		480
6/12/2018	62	150	180			
6/13/2018				230		390
10/9/2018	68	150	170			
10/10/2018				300		260
1/29/2019					280	
3/25/2019	54	210	150		250	
3/26/2019				290		370
9/10/2019	14	160	110	260	230	360
3/9/2020	56	190				
3/10/2020			170	300	260	450
9/16/2020	44	150	150	300	320	
9/17/2020						460
3/23/2021	53	220		300	270	
3/24/2021			150			380
8/23/2021	55	200				
8/24/2021			160	300	280	
8/25/2021						470
2/22/2022	38	210	150	300	270	420
8/2/2022	65	210	270	200	97.5 (D)	
8/3/2022						440



# Time Series

Constituent: TDS (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				272	287
5/6/2016		661	380		
6/21/2016	177	692	392	356	297
8/15/2016				330	230
8/16/2016	160	650	360		
9/28/2016				180	130
9/29/2016	190	640	380		
11/16/2016	240	680	420	330	290
1/17/2017			380	310	240
1/18/2017	180	630			
3/2/2017	170	660	410	340	270
4/18/2017			360	300	310
4/19/2017		600			
4/25/2017	170				
7/13/2017	150				
10/10/2017	160	600	400	340	450
6/12/2018	170				
6/13/2018		570	320	320	600
10/10/2018	48	470	300	270	410
3/26/2019	180	530	370	320	630
9/10/2019	140	470	360	260	660
3/10/2020	170	540	390	370	600
9/16/2020	190	530			
9/17/2020			410	320	740
3/24/2021	190	490	430	330	530
8/24/2021		510	450		
8/25/2021	230			390	720
2/22/2022	190				
2/23/2022		490	450	390	630
8/2/2022	150				
8/3/2022			430	400	
8/4/2022		480			620

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-11 (bg)	MGWA-5 (bg)	MGWA-6 (bg)	MGWA-6A (bg)	MGWC-1
5/5/2016	<0.001		<0.001	<0.001		
5/6/2016						<0.001
6/20/2016	<0.001	<0.001	<0.001			
6/21/2016				0.0001 (J)		9E-05 (J)
8/15/2016	<0.001	<0.001	<0.001	<0.001		
8/16/2016						<0.001
9/28/2016	<0.001	<0.001	<0.001	<0.001		<0.001
11/16/2016	<0.001	<0.001	<0.001	<0.001		<0.001
1/16/2017	<0.001					
1/17/2017		<0.001	<0.001	<0.001		
1/19/2017						<0.001
3/2/2017	<0.001	<0.001	<0.001	<0.001		<0.001
4/18/2017	<0.001	<0.001	<0.001	<0.001		9.5E-05 (J)
7/13/2017		<0.001				
3/29/2018	<0.001	<0.001	<0.001	<0.001		0.00014 (J)
6/12/2018	<0.001	<0.001	<0.001			
6/13/2018				<0.001		<0.001
10/9/2018	<0.001	<0.001	<0.001			
10/10/2018				<0.001		<0.001
1/28/2019	<0.001	<0.001				
1/29/2019			<0.001	<0.001	<0.001	<0.001
1/28/2020	<0.001	0.00033 (J)	<0.001	0.00027 (J)	<0.001	
1/29/2020						0.00032 (J)
3/9/2020	0.00058 (J)	0.00036 (J)				
3/10/2020			0.00015 (J)	0.00019 (J)	<0.001	<0.001
9/16/2020	<0.001	0.00041 (J)	0.00018 (J)	0.00021 (J)	<0.001	
9/17/2020						0.00016 (J)
3/23/2021	0.00046 (J)	0.00051 (J)		0.00025 (J)	<0.001	
3/24/2021			<0.001			<0.001
8/23/2021	<0.001	0.0004 (J)				
8/24/2021			<0.001	0.00017 (J)	<0.001	
8/25/2021						<0.001
2/22/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
8/3/2022						<0.001

# Time Series

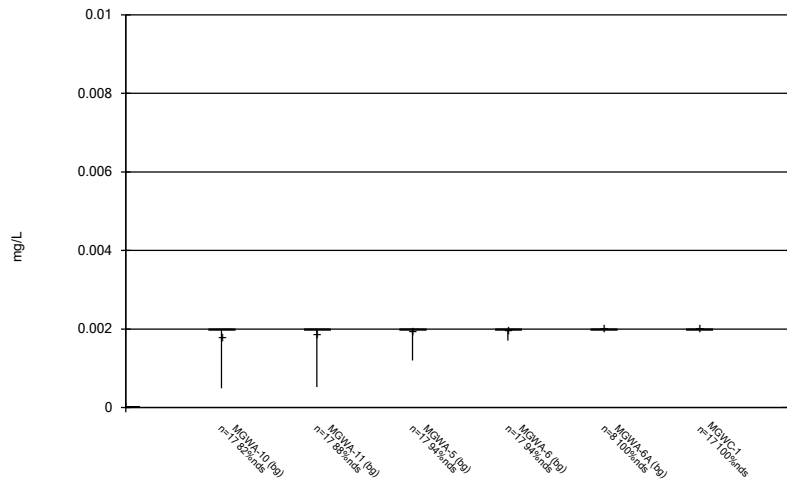
Constituent: Thallium (mg/L) Analysis Run 11/10/2022 2:32 PM View: Constituents View

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.001	<0.001
5/6/2016		<0.001	<0.001		
6/21/2016	<0.001	<0.001	<0.001	<0.001	0.0001 (J)
8/15/2016				<0.001	0.00016 (J)
8/16/2016	<0.001	<0.001	<0.001		
9/28/2016				<0.001	0.00014 (J)
9/29/2016	<0.001	<0.001	<0.001		
11/16/2016	<0.001	<0.001	<0.001	<0.001	9E-05 (J)
1/17/2017			<0.001	<0.001	0.00016 (J)
1/18/2017	<0.001	<0.001			
3/2/2017	<0.001	<0.001	<0.001	<0.001	0.00018 (J)
4/18/2017			<0.001	<0.001	0.00019 (J)
4/19/2017		<0.001			
4/25/2017	<0.001				
7/13/2017	<0.001				
3/29/2018	<0.001			<0.001	
3/30/2018		<0.001	<0.001		0.00027 (J)
6/12/2018	<0.001				
6/13/2018		<0.001	<0.001	<0.001	0.00027 (J)
10/10/2018	<0.001	<0.001	<0.001	<0.001	0.00025 (J)
1/29/2019	<0.001	<0.001	<0.001	<0.001	<0.001
1/28/2020	<0.001			<0.001	
1/29/2020		0.00021 (J)	0.00037 (J)		0.00042 (J)
3/10/2020	0.00015 (J)	<0.001	0.00016 (J)	<0.001	0.00025 (J)
9/16/2020	0.00027 (J)	<0.001			
9/17/2020			<0.001	<0.001	0.00031 (J)
3/24/2021	<0.001	<0.001	<0.001	<0.001	<0.001
8/24/2021		<0.001	<0.001		
8/25/2021	<0.001			<0.001	0.0004 (J)
2/22/2022	<0.001				
2/23/2022		<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001				
8/3/2022			<0.001	<0.001	
8/4/2022		<0.001			<0.001

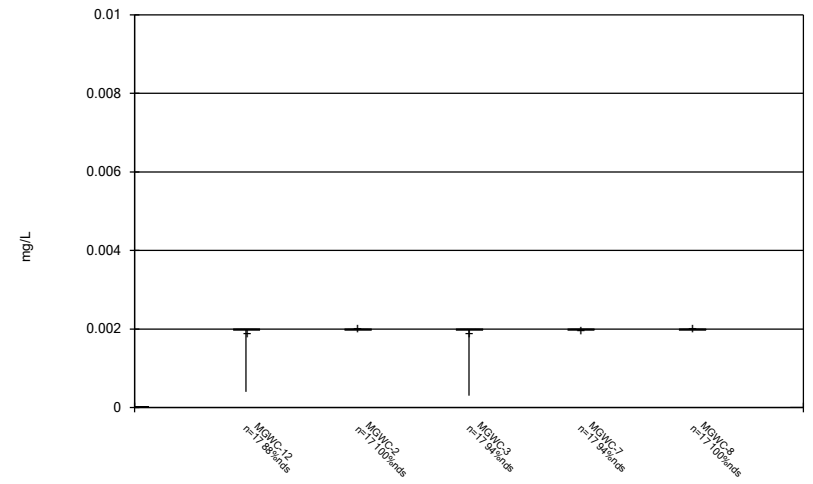
FIGURE B.

Box & Whiskers Plot



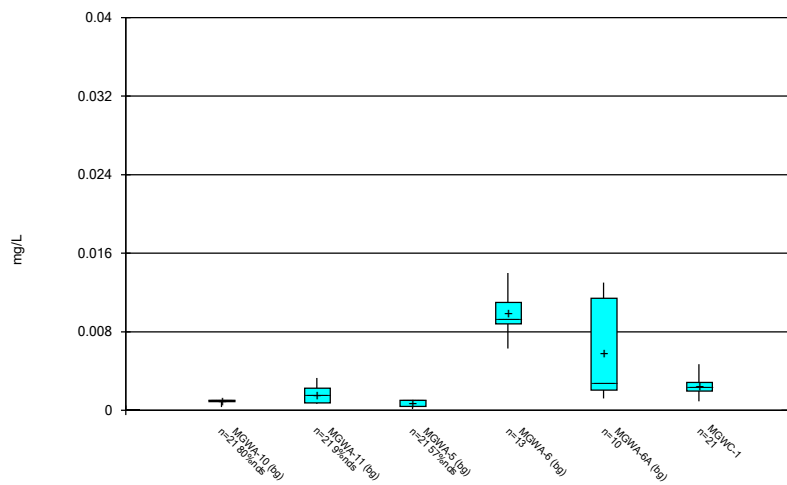
Constituent: Antimony Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



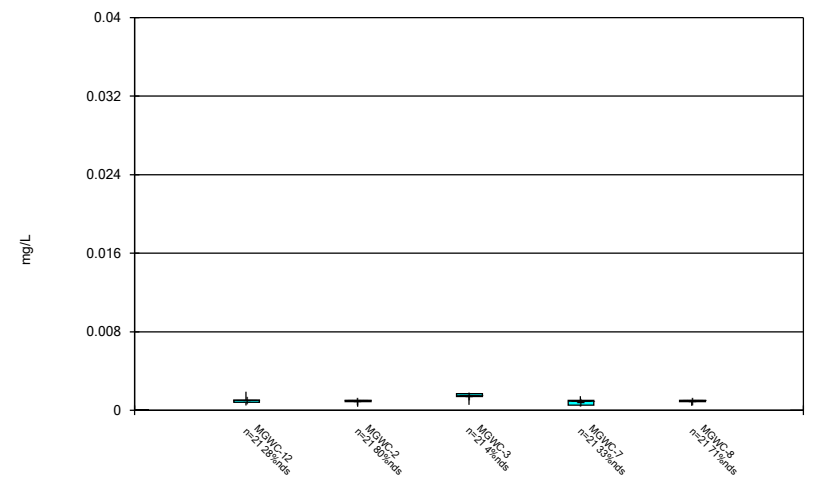
Constituent: Antimony Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



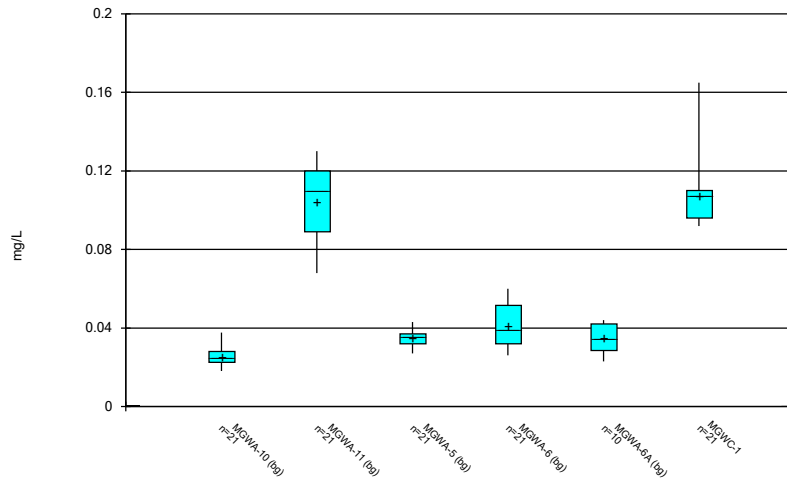
Constituent: Arsenic Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



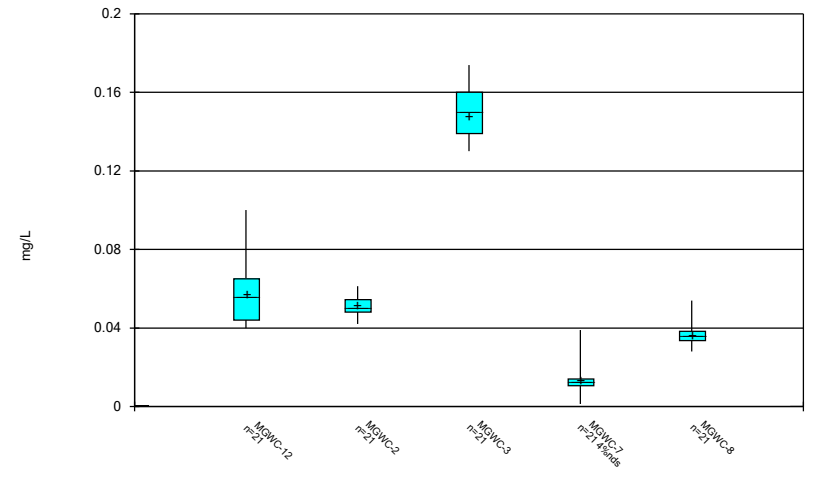
Constituent: Arsenic Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



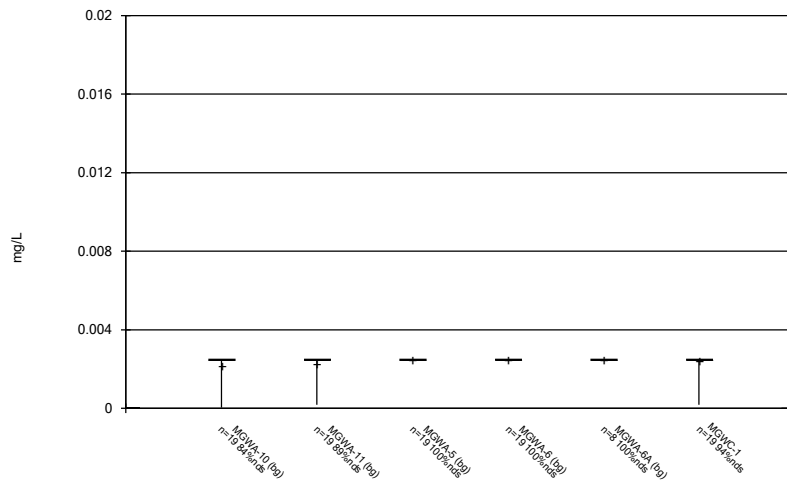
Constituent: Barium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



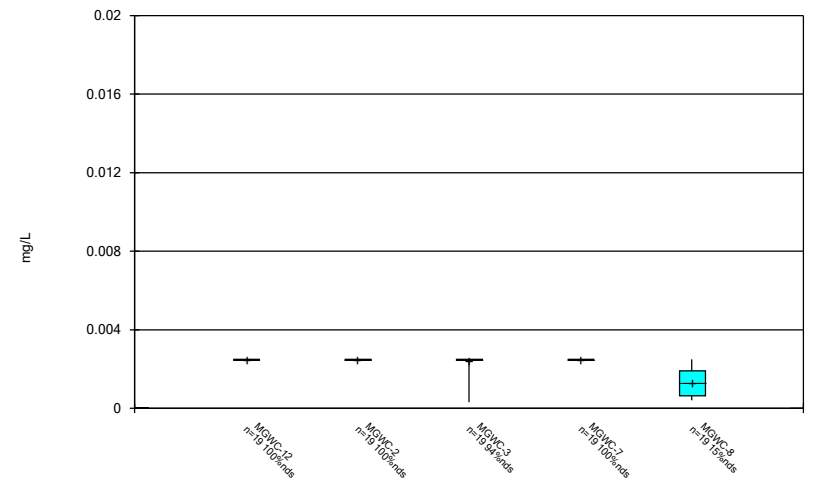
Constituent: Barium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



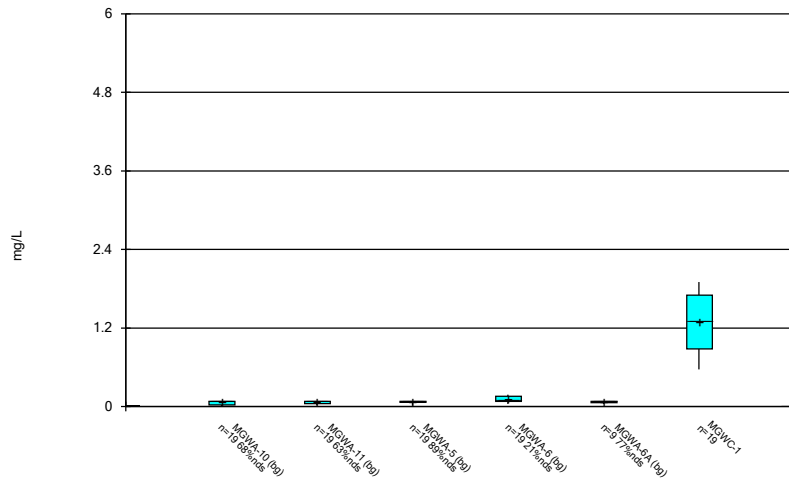
Constituent: Beryllium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



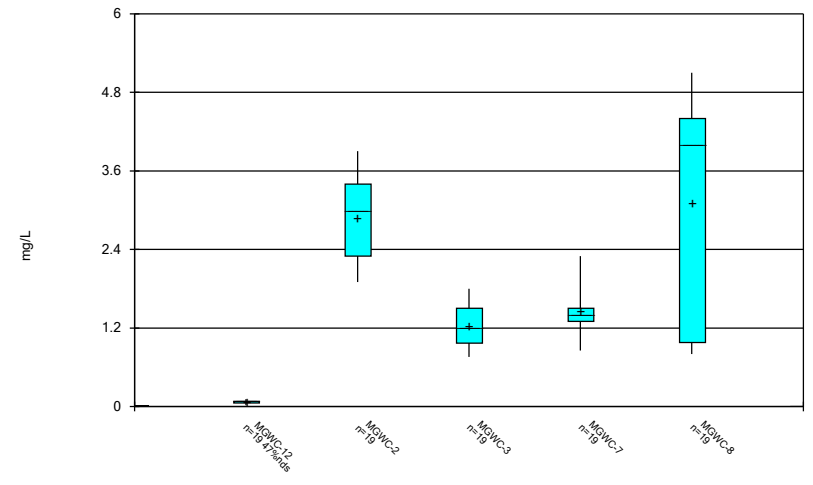
Constituent: Beryllium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



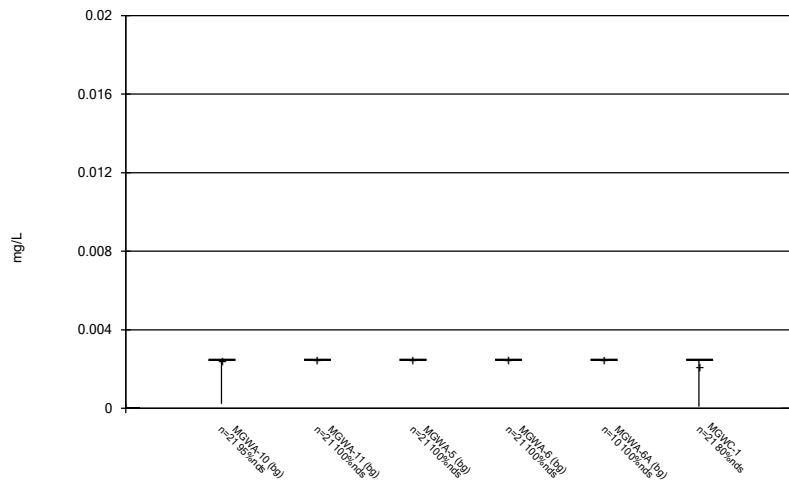
Constituent: Boron Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



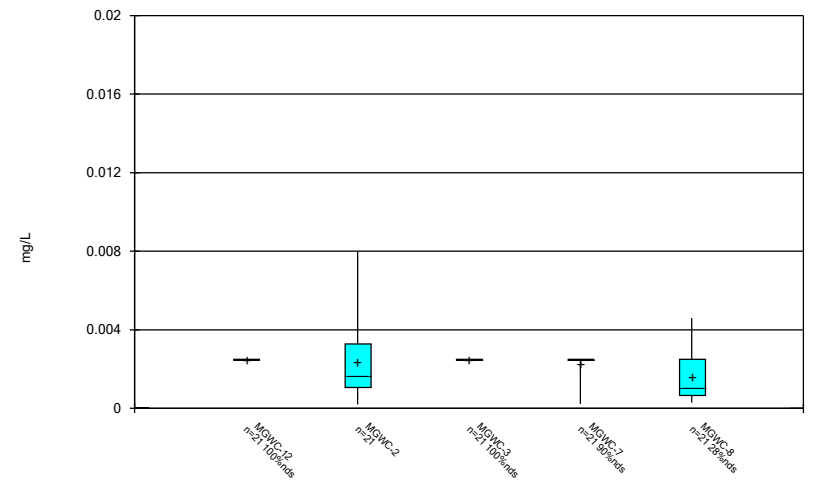
Constituent: Boron Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



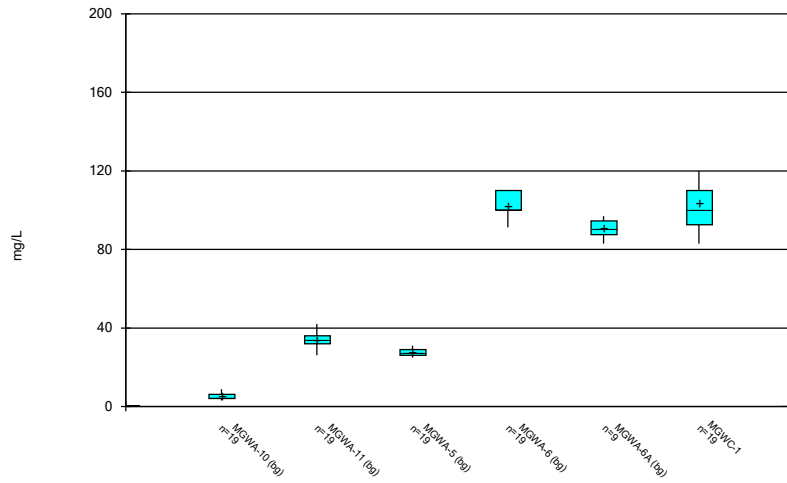
Constituent: Cadmium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



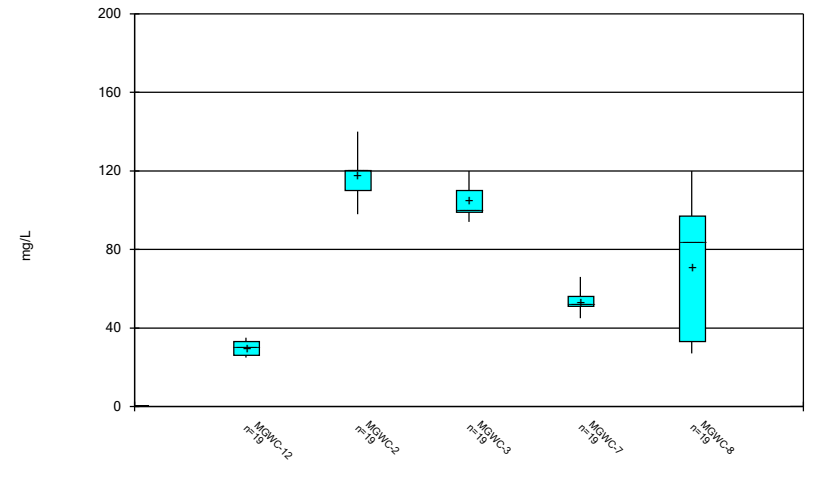
Constituent: Cadmium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



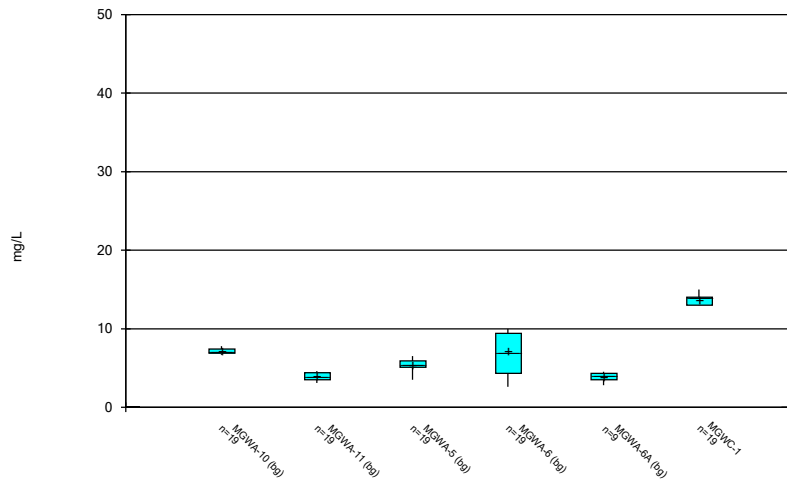
Constituent: Calcium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



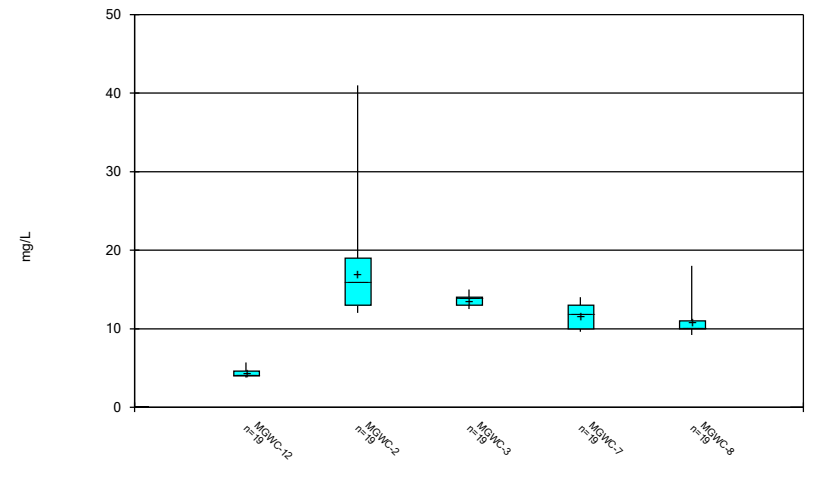
Constituent: Calcium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

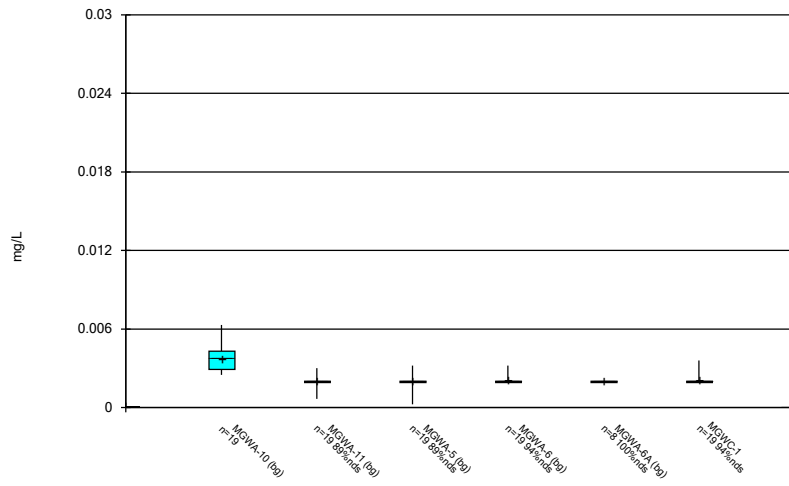
Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

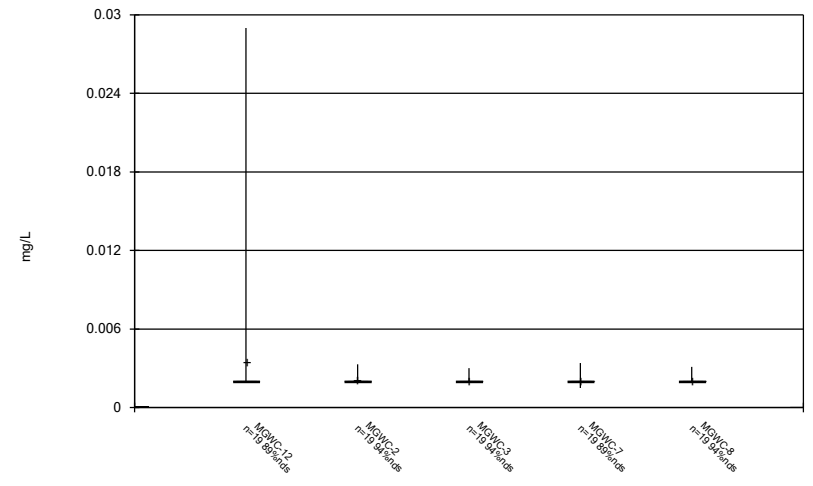


Box & Whiskers Plot



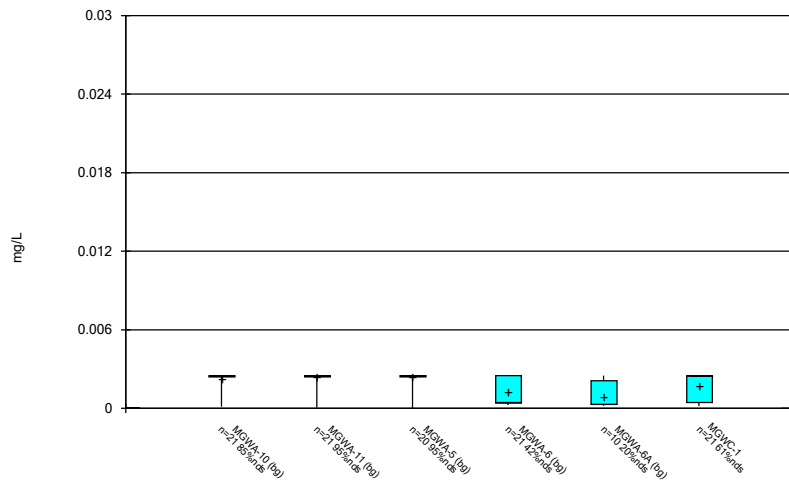
Constituent: Chromium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



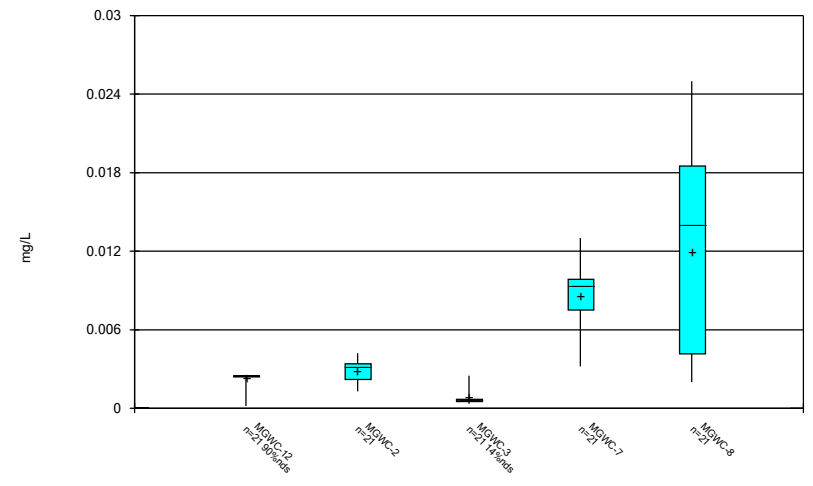
Constituent: Chromium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



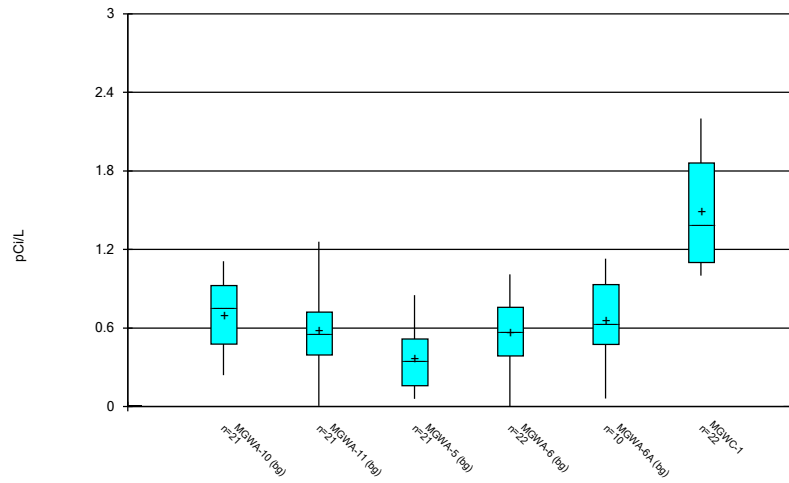
Constituent: Cobalt Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



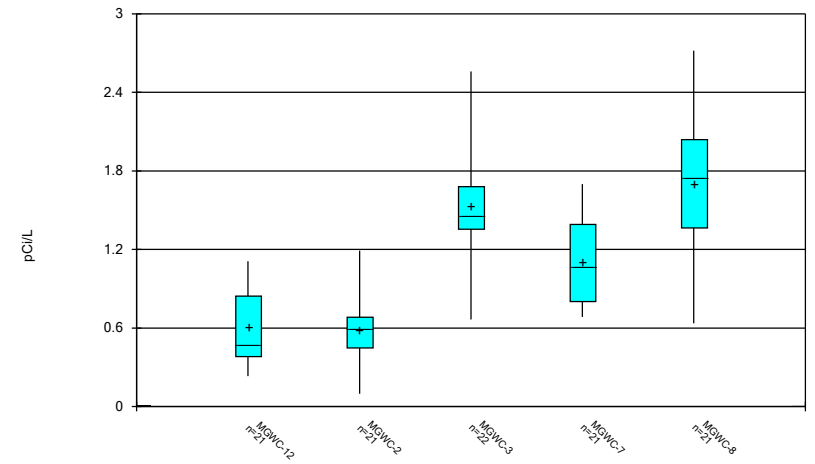
Constituent: Cobalt Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



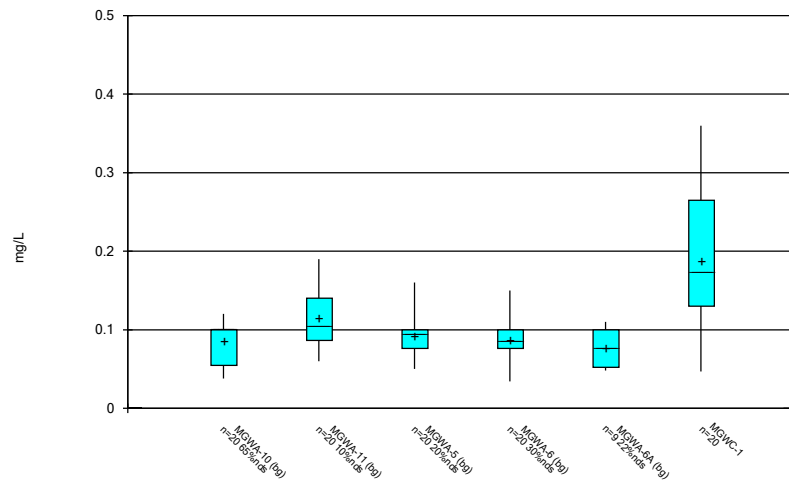
Constituent: Combined Radium 226 + 228 Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



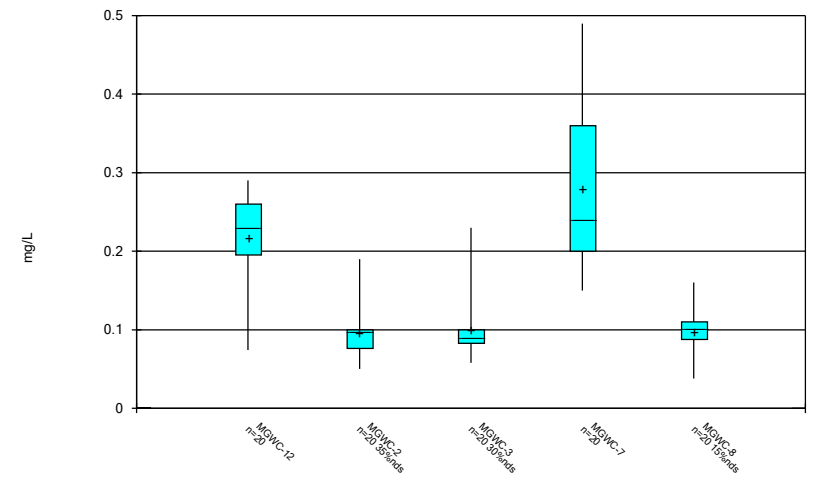
Constituent: Combined Radium 226 + 228 Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



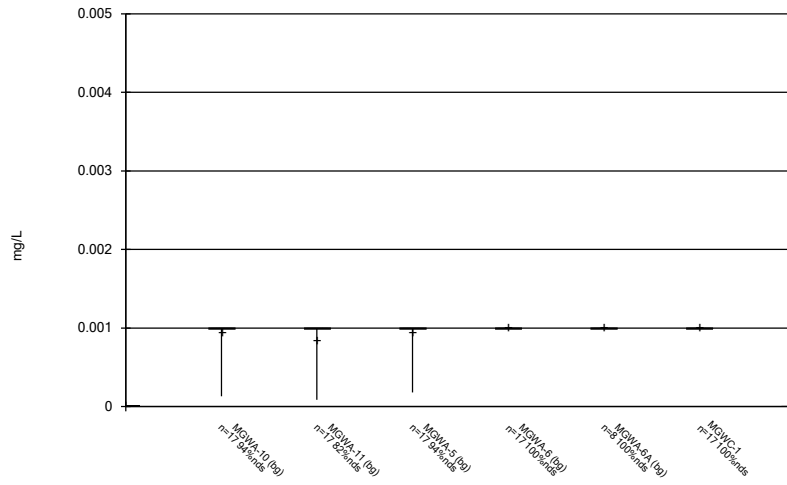
Constituent: Fluoride Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



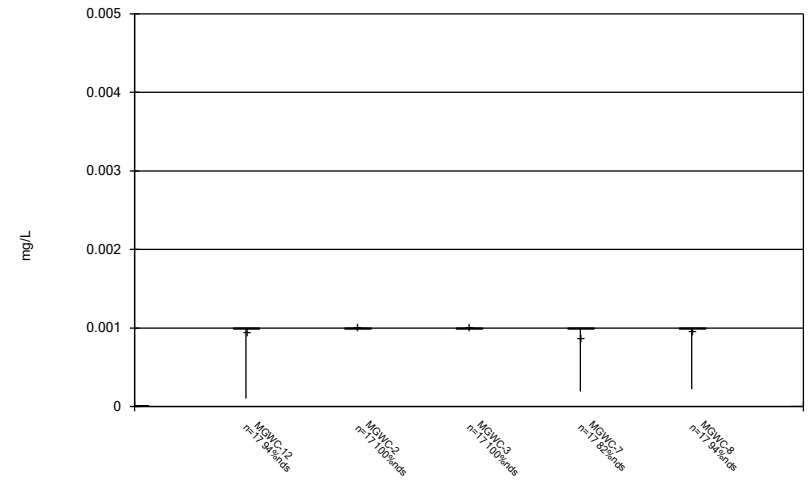
Constituent: Fluoride Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



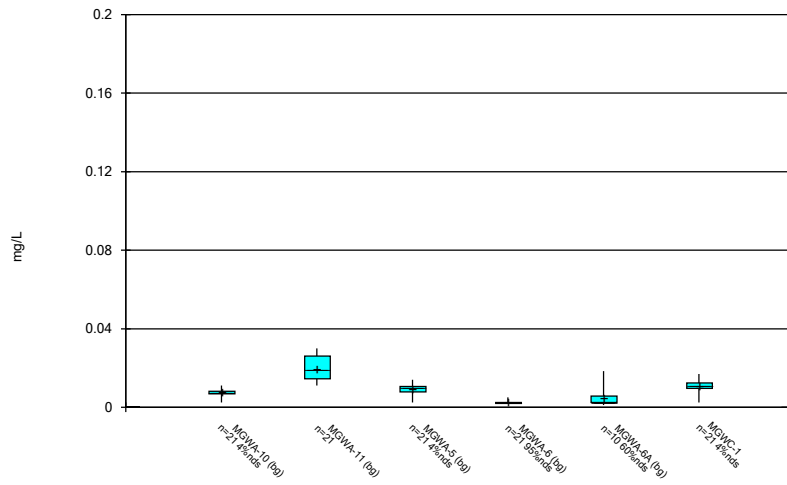
Constituent: Lead Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



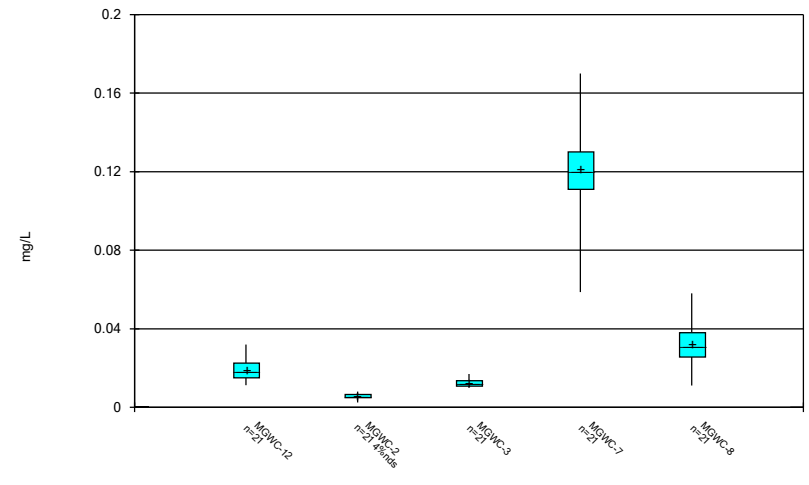
Constituent: Lead Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



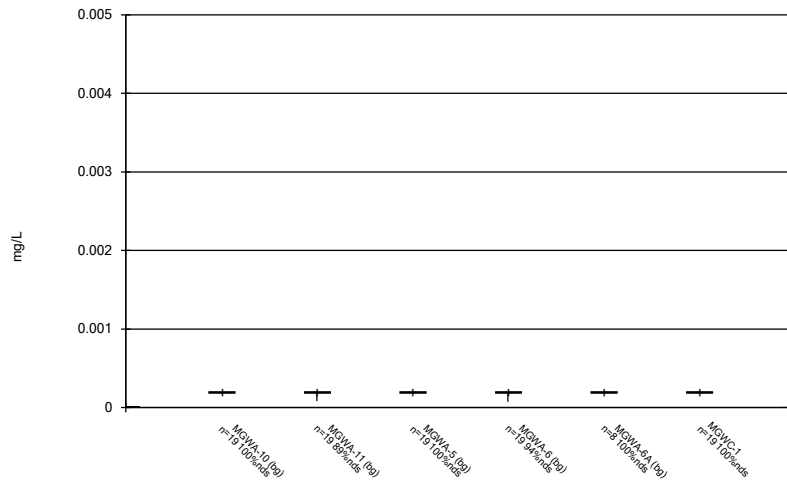
Constituent: Lithium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



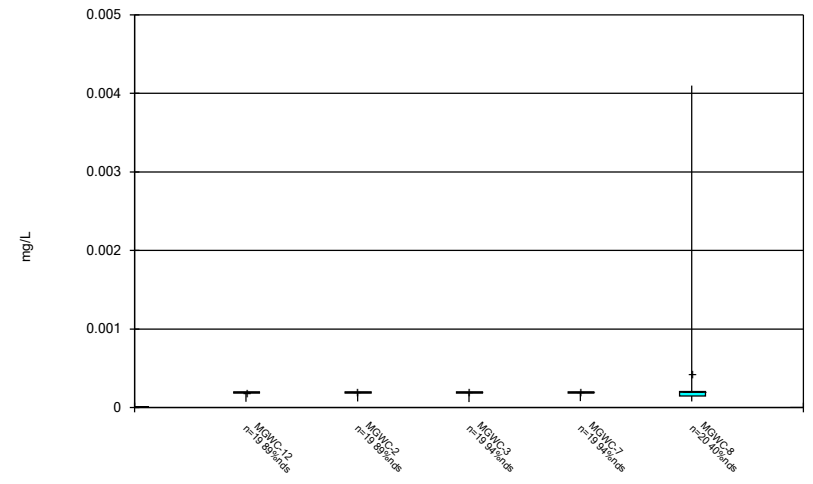
Constituent: Lithium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



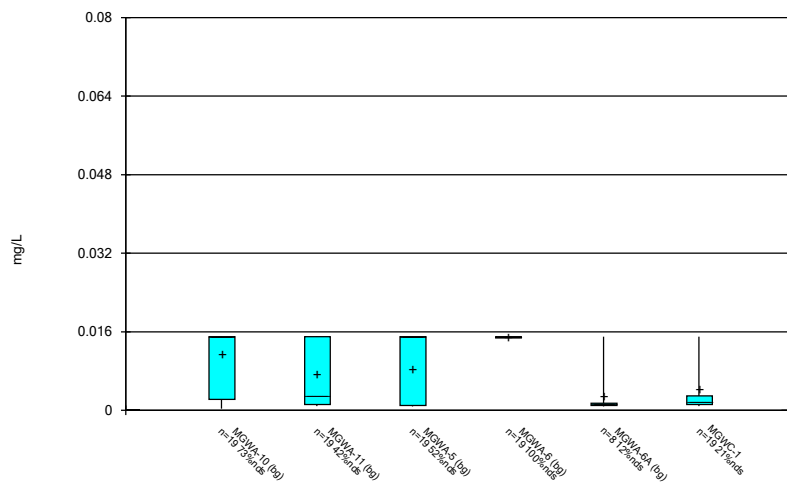
Constituent: Mercury Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



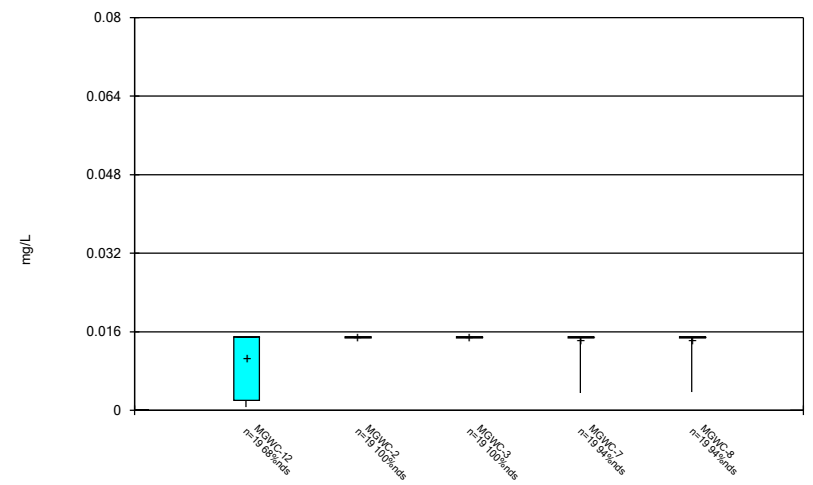
Constituent: Mercury Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



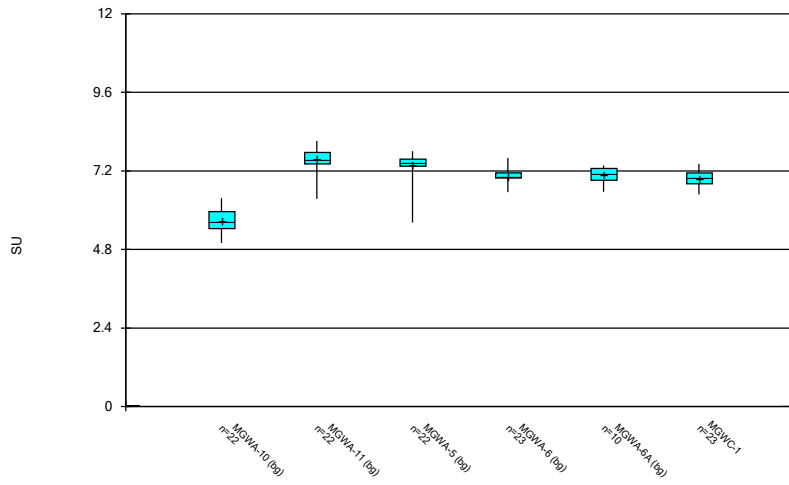
Constituent: Molybdenum Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



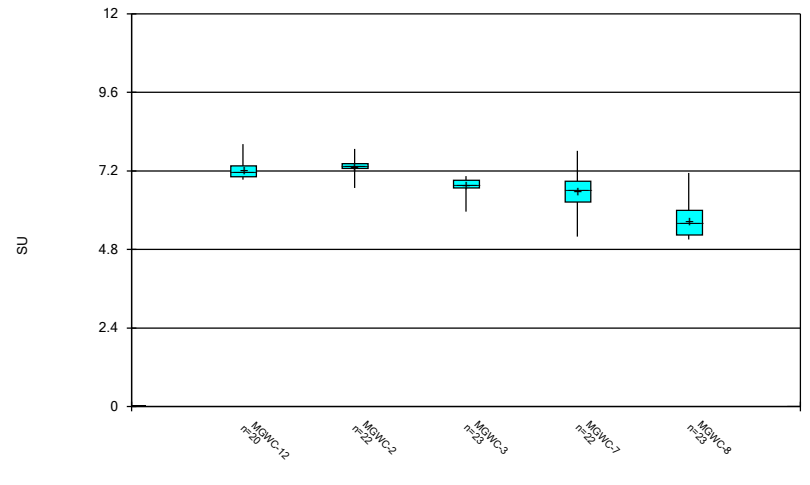
Constituent: Molybdenum Analysis Run 11/10/2022 2:33 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



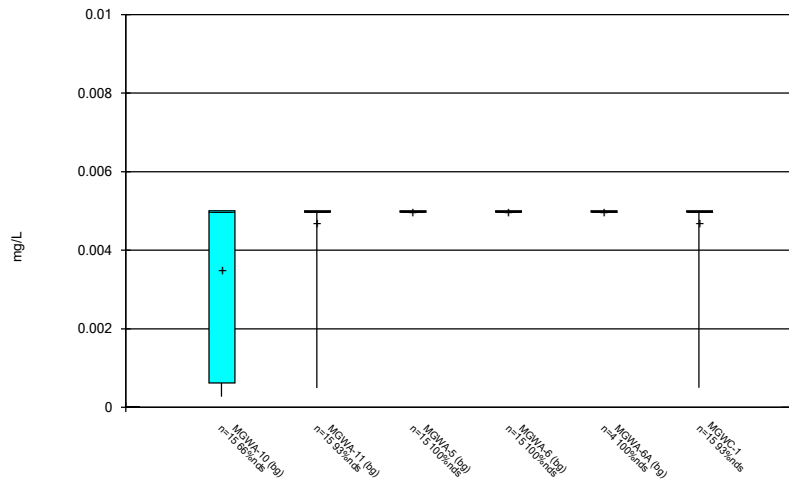
Constituent: pH Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



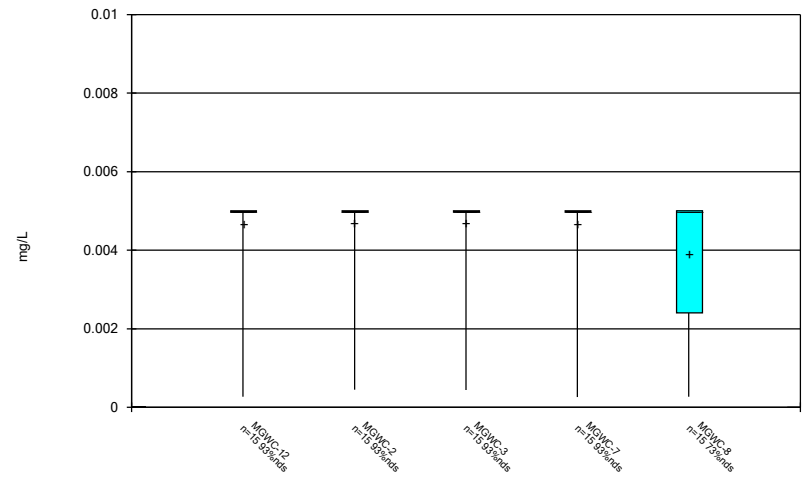
Constituent: pH Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



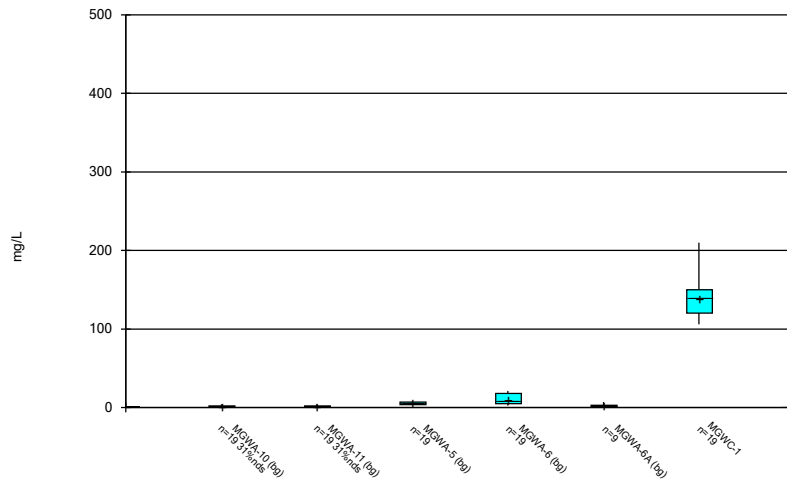
Constituent: Selenium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



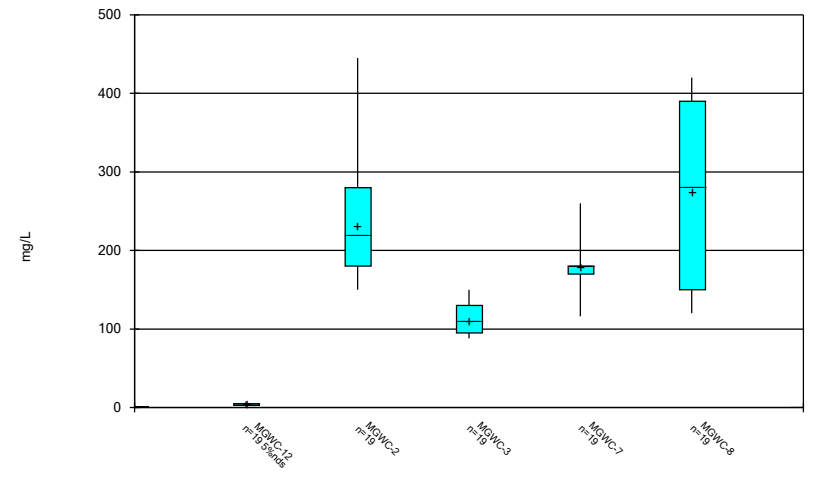
Constituent: Selenium Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



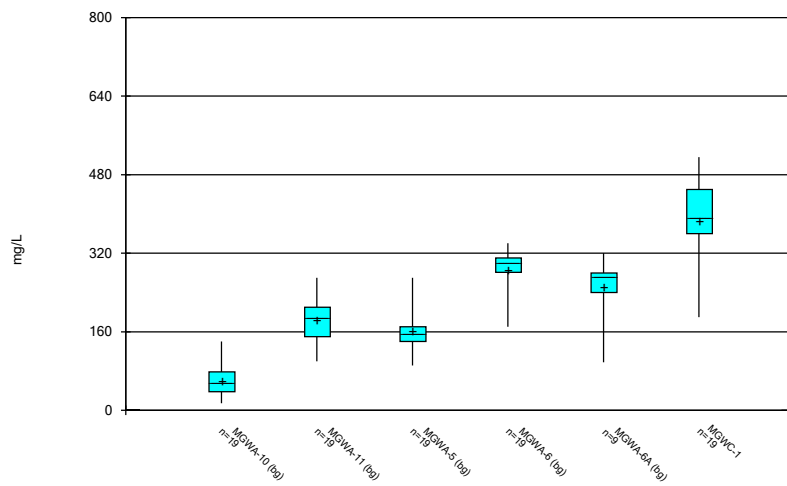
Constituent: Sulfate Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



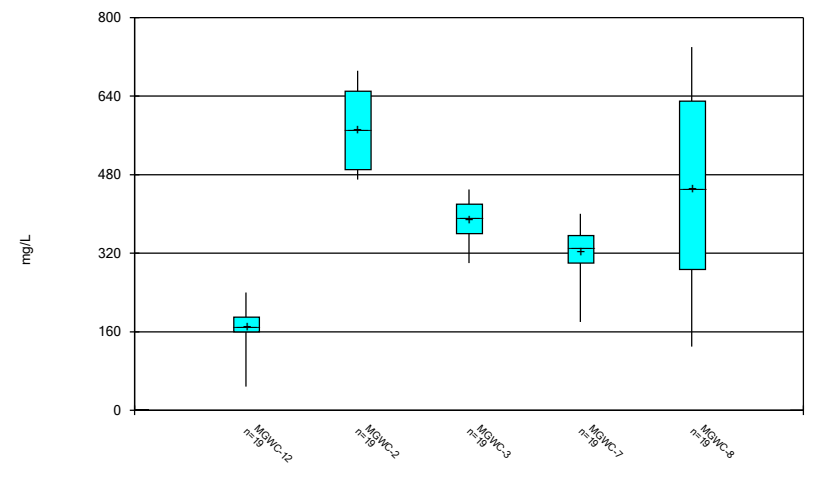
Constituent: Sulfate Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



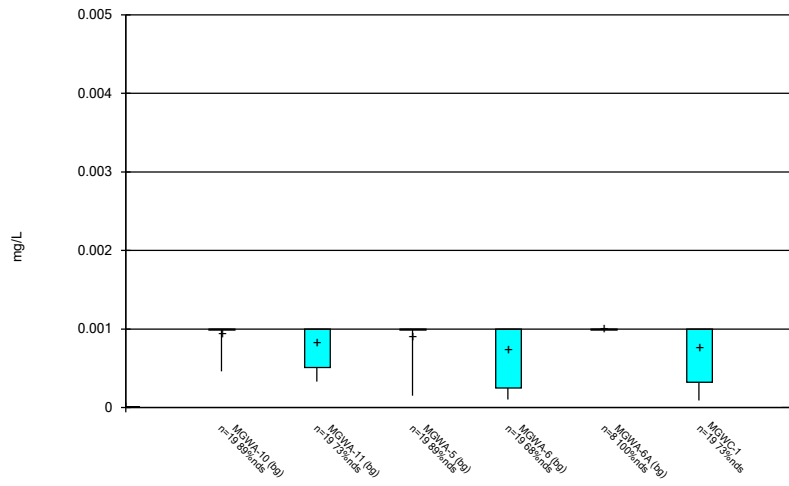
Constituent: TDS Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



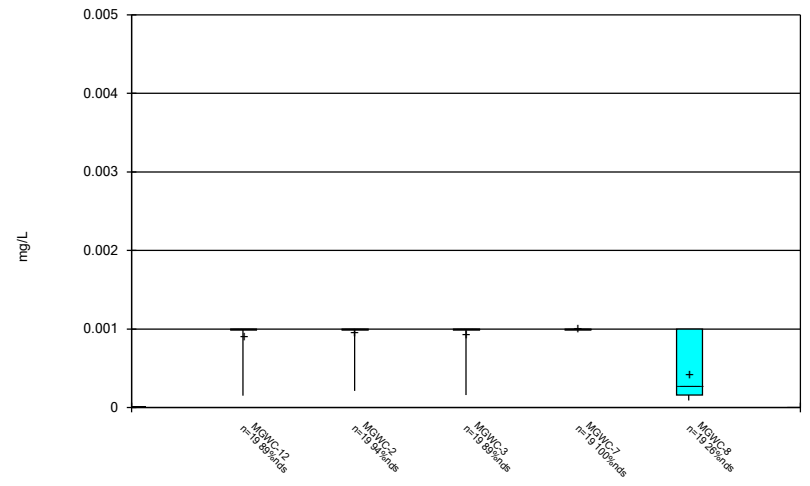
Constituent: TDS Analysis Run 11/10/2022 2:33 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



Constituent: Thallium    Analysis Run 11/10/2022 2:33 PM    View: Constituents View  
Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond

### Box & Whiskers Plot



Constituent: Thallium    Analysis Run 11/10/2022 2:33 PM    View: Constituents View  
Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond

FIGURE C.



# Outlier Summary

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 2:34 PM

---

MGWA-5 Cobalt (mg/L)  
MGWC-12 pH (SU)

9/10/2019	10.96 (o)
9/16/2020	11.03 (o)
8/2/2022	0.012 (o)

FIGURE D.

# Interwell Prediction Limits - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	8/3/2022	1.7	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	8/4/2022	1.9	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	8/3/2022	0.76	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	8/3/2022	2.3	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	8/4/2022	4.3	Yes	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
Chloride (mg/L)	MGWC-1	9.419	n/a	8/3/2022	13	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.419	n/a	8/4/2022	12	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.419	n/a	8/3/2022	13	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.419	n/a	8/3/2022	11	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.419	n/a	8/4/2022	13	Yes	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	8/3/2022	0.2	Yes	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	18.98	n/a	8/3/2022	140	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	18.98	n/a	8/4/2022	150	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	18.98	n/a	8/3/2022	130	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	18.98	n/a	8/3/2022	220	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	18.98	n/a	8/4/2022	350	Yes	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	347.3	n/a	8/3/2022	440	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	347.3	n/a	8/4/2022	480	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	347.3	n/a	8/3/2022	430	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	347.3	n/a	8/3/2022	400	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	347.3	n/a	8/4/2022	620	Yes	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2

# Interwell Prediction Limits - All Results

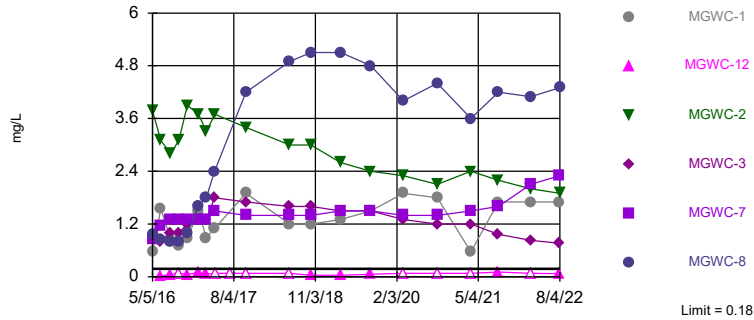
Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron (mg/L)</b>	<b>MGWC-1</b>	<b>0.18</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>1.7</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-12	0.18	n/a	8/2/2022	0.071J	No	85	n/a	n/a	62.35	n/a	n/a	0.0002681	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>0.18</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>1.9</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MGWC-3</b>	<b>0.18</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>0.76</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.18</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>2.3</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.18</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>4.3</b>	<b>Yes</b>	<b>85</b>	<b>n/a</b>	<b>n/a</b>	<b>62.35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002681</b>	<b>NP Inter (NDs) 1 of 2</b>
Calcium (mg/L)	MGWC-1	110	n/a	8/3/2022	110	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	8/2/2022	34	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	8/4/2022	98	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	8/3/2022	110	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-7	110	n/a	8/3/2022	66	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	8/4/2022	100	No	85	n/a	n/a	0	n/a	n/a	0.0002681	NP Inter (normality) 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-1</b>	<b>9.419</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>13</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MGWC-12	9.419	n/a	8/2/2022	4.9	No	85	2.353	0.3868	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>9.419</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>12</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-3</b>	<b>9.419</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>13</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>9.419</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>11</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Chloride (mg/L)</b>	<b>MGWC-8</b>	<b>9.419</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>13</b>	<b>Yes</b>	<b>85</b>	<b>2.353</b>	<b>0.3868</b>	<b>0</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Fluoride (mg/L)	MGWC-1	0.19	n/a	8/3/2022	0.12	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	8/2/2022	0.074J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-2	0.19	n/a	8/4/2022	0.072J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	8/3/2022	0.079J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>0.19</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>0.2</b>	<b>Yes</b>	<b>89</b>	<b>n/a</b>	<b>n/a</b>	<b>30.34</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002435</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	MGWC-8	0.19	n/a	8/4/2022	0.087J	No	89	n/a	n/a	30.34	n/a	n/a	0.0002435	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	8.12	5	8/3/2022	7.23	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-12	8.12	5	8/2/2022	7.06	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-2	8.12	5	8/4/2022	7.37	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-3	8.12	5	8/3/2022	6.91	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-7	8.12	5	8/3/2022	6.86	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
pH (SU)	MGWC-8	8.12	5	8/4/2022	6.5	No	99	n/a	n/a	0	n/a	n/a	0.0003951	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-1</b>	<b>18.98</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>140</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-12	18.98	n/a	8/2/2022	3.1	No	85	0.9417	1.081	14.12	None	ln(x)	0.001254	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>18.98</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>150</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-3</b>	<b>18.98</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>130</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-7</b>	<b>18.98</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>220</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-8</b>	<b>18.98</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>350</b>	<b>Yes</b>	<b>85</b>	<b>0.9417</b>	<b>1.081</b>	<b>14.12</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-1</b>	<b>347.3</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>440</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
TDS (mg/L)	MGWC-12	347.3	n/a	8/2/2022	150	No	85	180.7	89.99	0	None	No	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>347.3</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>480</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-3</b>	<b>347.3</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>430</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-7</b>	<b>347.3</b>	<b>n/a</b>	<b>8/3/2022</b>	<b>400</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>347.3</b>	<b>n/a</b>	<b>8/4/2022</b>	<b>620</b>	<b>Yes</b>	<b>85</b>	<b>180.7</b>	<b>89.99</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>

Sanitas™ v.9.6.35 . UG  
Hollow symbols indicate censored values.

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Non-parametric



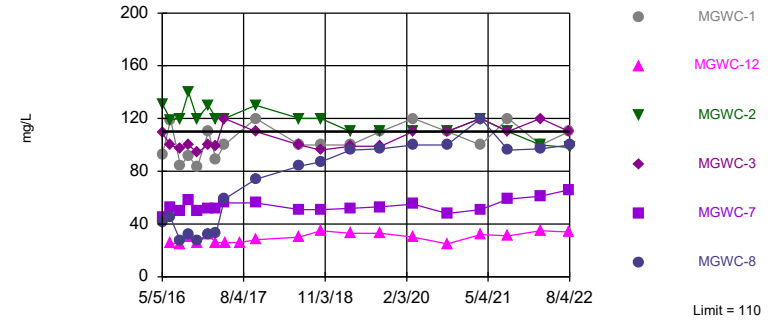
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 85 background values. 62.35% NDs. Annual per-constituent alpha = 0.003213. Individual comparison alpha = 0.0002681 (1 of 2). Comparing 6 points to limit.

Constituent: Boron Analysis Run 11/10/2022 2:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sanitas™ v.9.6.35 . UG

Within Limit

Prediction Limit  
Interwell Non-parametric



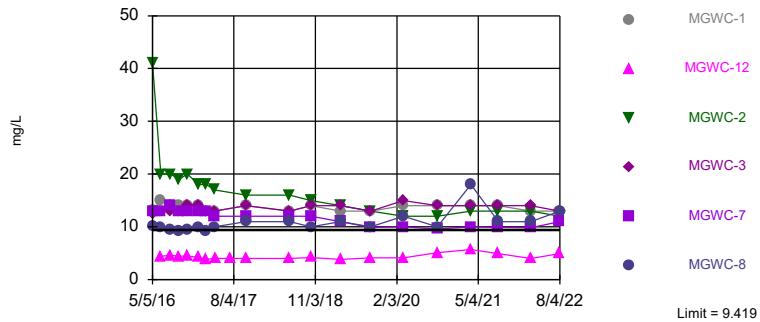
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Annual per-constituent alpha = 0.003213. Individual comparison alpha = 0.0002681 (1 of 2). Comparing 6 points to limit.

Constituent: Calcium Analysis Run 11/10/2022 2:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sanitas™ v.9.6.35 . UG

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Parametric

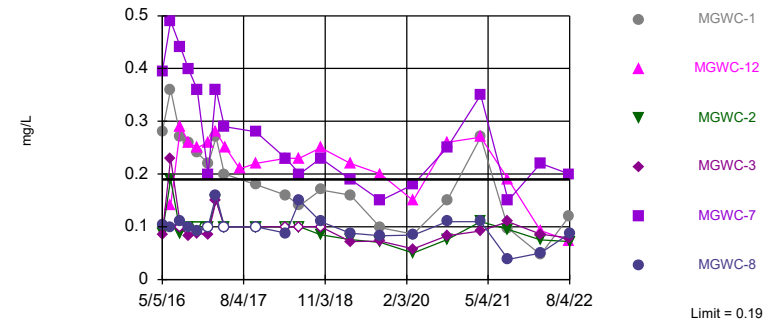


Background Data Summary (based on square root transformation): Mean=2.353, Std. Dev.=0.3868, n=85. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9736, critical = 0.961. Kappa = 1.852 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Chloride Analysis Run 11/10/2022 2:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sanitas™ v.9.6.35 . UG  
Hollow symbols indicate censored values.  
Exceeds Limit: MGWC-7

Prediction Limit  
Interwell Non-parametric

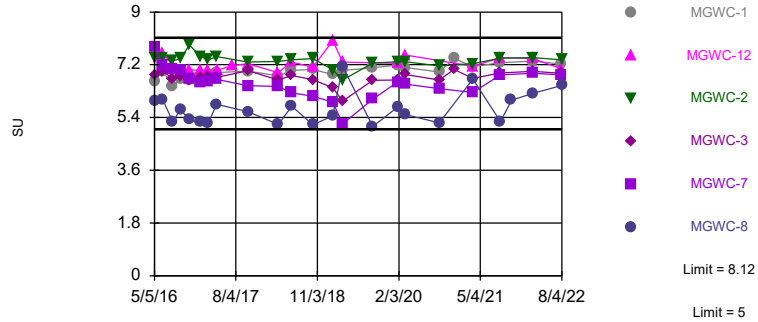


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 89 background values. 30.34% NDs. Annual per-constituent alpha = 0.002919. Individual comparison alpha = 0.0002435 (1 of 2). Comparing 6 points to limit.

Constituent: Fluoride Analysis Run 11/10/2022 2:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Within Limits

Prediction Limit  
Interwell Non-parametric



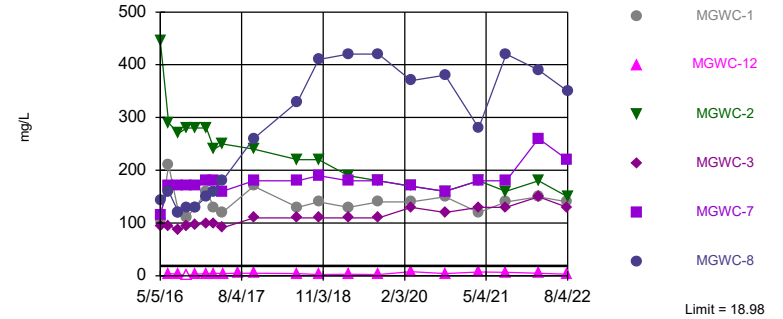
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 99 background values. Annual per-constituent alpha = 0.004736. Individual comparison alpha = 0.0003951 (1 of 2). Comparing 6 points to limit.

Constituent: pH Analysis Run 11/10/2022 2:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Parametric

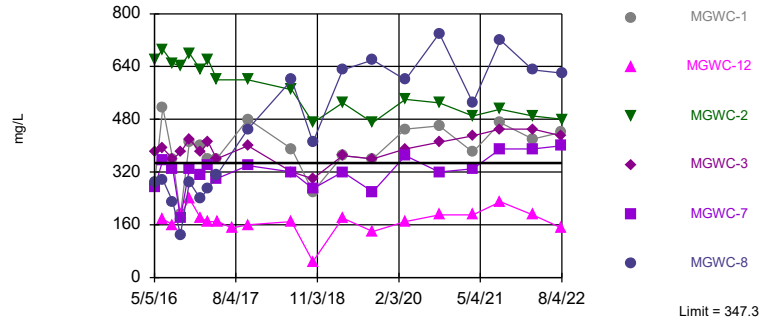


Background Data Summary (based on natural log transformation): Mean=0.9417, Std. Dev.=1.081, n=85, 14.12% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9695, critical = 0.961. Kappa = 1.852 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Sulfate Analysis Run 11/10/2022 2:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=180.7, Std. Dev.=89.99, n=85. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9667, critical = 0.961. Kappa = 1.852 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: TDS Analysis Run 11/10/2022 2:35 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWA-5 (bg)	MGWC-7	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	<0.08	0.157	0.976	<0.08	0.855				
5/6/2016						3.78	0.567	0.926	
6/20/2016	0.011 (J)			0.013 (J)					0.017 (J)
6/21/2016		0.124	0.862		1.15	3.1	1.55	0.792	
8/15/2016	0.022 (J)	0.18	0.8	0.023 (J)	1.3				0.032 (J)
8/16/2016						2.8	0.85	1	
9/28/2016	0.023 (J)	0.17	0.8	<0.08	1.3		0.7		0.021 (J)
9/29/2016						3.1		1	
11/16/2016	<0.08	0.17	0.98	<0.08	1.3	3.9	0.88	1.2	<0.08
1/16/2017	0.021 (J)								
1/17/2017		0.17	1.6	<0.08	1.3			1.3	<0.08
1/18/2017						3.7			
1/19/2017							1.5		
3/2/2017	<0.08	0.14	1.8	<0.08	1.3	3.3	0.89	1.3	<0.08
4/18/2017	<0.08	0.14	2.4	<0.08	1.5		1.1	1.8	<0.08
4/19/2017						3.7			
4/25/2017									
7/13/2017									<0.08
10/10/2017	0.021 (J)	0.12	4.2	<0.08	1.4	3.4	1.9	1.7	0.025 (J)
6/12/2018	<0.08			<0.08					<0.08
6/13/2018		0.11	4.9		1.4	3	1.2	1.6	
10/9/2018	<0.08			<0.08					<0.08
10/10/2018		0.096 (J)	5.1		1.4	3	1.2	1.6	
1/29/2019									
3/25/2019	<0.08			<0.08					<0.08
3/26/2019		0.079 (J)	5.1		1.5	2.6	1.3	1.5	
9/10/2019	<0.08	0.097	4.8	<0.08	1.5	2.4	1.5	1.5	<0.08
3/9/2020	0.045 (J)								<0.08
3/10/2020		0.051 (J)	4	<0.08	1.4	2.3	1.9	1.3	
9/16/2020	<0.08	0.041 (J)		<0.08		2.1			0.045 (J)
9/17/2020			4.4		1.4		1.8	1.2	
3/23/2021	<0.08	<0.08							0.047 (J)
3/24/2021			3.6	<0.08	1.5	2.4	0.57	1.2	
8/23/2021	<0.08								0.043 (J)
8/24/2021		<0.08		<0.08		2.2		0.97	
8/25/2021			4.2		1.6		1.7		
2/22/2022	<0.08	<0.08		<0.08			1.7		<0.08
2/23/2022			4.1		2.1	2		0.83	
8/2/2022	<0.08	<0.08		<0.08					<0.08
8/3/2022					2.3		1.7	0.76	
8/4/2022			4.3			1.9			

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	0.0201 (J)	
8/15/2016		
8/16/2016	0.055	
9/28/2016		
9/29/2016	<0.08	
11/16/2016	0.055	
1/16/2017		
1/17/2017		
1/18/2017	0.097	
1/19/2017		
3/2/2017	0.064	
4/18/2017		
4/19/2017		
4/25/2017	<0.08	
7/13/2017	<0.08	
10/10/2017	<0.08	
6/12/2018	<0.08	
6/13/2018		
10/9/2018		
10/10/2018	0.034 (J)	
1/29/2019		<0.08
3/25/2019		<0.08
3/26/2019	0.032 (J)	
9/10/2019	0.06 (J)	0.04 (J)
3/9/2020		
3/10/2020	<0.08	<0.08
9/16/2020	<0.08	0.04 (J)
9/17/2020		
3/23/2021		<0.08
3/24/2021	<0.08	
8/23/2021		
8/24/2021		<0.08
8/25/2021	0.11	
2/22/2022	<0.08	<0.08
2/23/2022		
8/2/2022	0.071 (J)	<0.08
8/3/2022		
8/4/2022		



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWA-5 (bg)	MGWC-7	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	8.83	105	41.2	27	45				
5/6/2016						131	92.5	109	
6/20/2016	8.1			29.4					35.5
6/21/2016		91.2	44.7		52.8	119	119	99.7	
8/15/2016	6.1	94	27	26	50				34
8/16/2016						120	84	97	
9/28/2016	7.2	110	32	31	58		92		38
9/29/2016						140		100	
11/16/2016	5.2	98	27	26	50	120	83	94	33
1/16/2017	3.8								
1/17/2017		100	32	29	52			100	34
1/18/2017						130			
1/19/2017							110		
3/2/2017	5.4	100	33	28	52	120	89	99	35
4/18/2017	5	110	59	27	56		100	120	33
4/19/2017						120			
4/25/2017									
7/13/2017									30
10/10/2017	4.8	110	74	31	56	130	120	110	39
6/12/2018	4.8			25					26
6/13/2018		100	84		51	120	100	100	
10/9/2018	4.5			29					29
10/10/2018		100	87		51	120	100	96	
1/29/2019									
3/25/2019	4.6			27					37
3/26/2019		100	96		52	110	100	99	
9/10/2019	4.9	110	97	27	53	110	110	99	36
3/9/2020	4								32
3/10/2020		100	100	29	55	110	120	110	
9/16/2020	6.8	100		28		110			30
9/17/2020			100		48		110	110	
3/23/2021	4	110							42
3/24/2021			120	28	51	120	100	120	
8/23/2021	5.8								34
8/24/2021		100		27		110		110	
8/25/2021			96		59		120		
2/22/2022	3.3	97		25			100		36
2/23/2022			97		61	100		120	
8/2/2022	3.1	110		26					36
8/3/2022					66		110	110	
8/4/2022			100			98			

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

---

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	25.5	
8/15/2016		
8/16/2016	25	
9/28/2016		
9/29/2016	30	
11/16/2016	26	
1/16/2017		
1/17/2017		
1/18/2017	32	
1/19/2017		
3/2/2017	26	
4/18/2017		
4/19/2017		
4/25/2017	26	
7/13/2017	26	
10/10/2017	28	
6/12/2018	30	
6/13/2018		
10/9/2018		
10/10/2018	35	
1/29/2019		95.1
3/25/2019		89
3/26/2019	33	
9/10/2019	33	86
3/9/2020		
3/10/2020	30	90
9/16/2020	25	93
9/17/2020		
3/23/2021		97
3/24/2021	32	
8/23/2021		
8/24/2021		83
8/25/2021	31	
2/22/2022	35	90
2/23/2022		
8/2/2022	34	94
8/3/2022		
8/4/2022		

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWA-5 (bg)	MGWC-7	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	7.35	9.67	10.1	6.51	13				
5/6/2016						41	13.2	12.5	
6/20/2016	7			5.9					4.3
6/21/2016		9.2	10		13	20	15	13	
8/15/2016	7.5	10	9.5	6.4	14				4.1
8/16/2016						20	14	13	
9/28/2016	7	10	9.2	6.1	13		14		3.9
9/29/2016						19		13	
11/16/2016	7.5	10	9.5	6.1	13	20	14	14	4.1
1/16/2017	7.7								
1/17/2017		9.4	10	5.7	13			14	3.9
1/18/2017						18			
1/19/2017							14		
3/2/2017	6.9	8.6	9.3	5.3	13	18	13	13	3.5
4/18/2017	6.8	8.9	10	5.3	12		13	13	3.7
4/19/2017						17			
4/25/2017									
7/13/2017									4.2
10/10/2017	6.9	8.3	11	5.3	12	16	14	14	3.4
6/12/2018	6.7			5.1					4.6
6/13/2018		7	11		12	16	13	13	
10/9/2018	7.1			5.6					4.5
10/10/2018		6.9	10		12	15	14	14	
1/29/2019									
3/25/2019	6.8			4.7					3.4
3/26/2019		5.8	11		11	14	13	14	
9/10/2019	7	6	10	5.1	9.9	13	13	13	3.5
3/9/2020	7.4								4.5
3/10/2020		5.1	12	5.4	10	12	14	15	
9/16/2020	7	4.3		5.2		12			4.6
9/17/2020			10		9.6		14	14	
3/23/2021	7.8	4							3.8
3/24/2021			18	5.5	10	13	14	14	
8/23/2021	7.3								4.4
8/24/2021		4		5.5		13		14	
8/25/2021			11		9.9		14		
2/22/2022	7.1	4		5.1			13		3.1
2/23/2022			11		9.8	13		14	
8/2/2022	7.4	2.6		3.5					3.4
8/3/2022					11		13	13	
8/4/2022			13			12			

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	4.4	
8/15/2016		
8/16/2016	4.6	
9/28/2016		
9/29/2016	4.4	
11/16/2016	4.5	
1/16/2017		
1/17/2017		
1/18/2017	4.2	
1/19/2017		
3/2/2017	3.9	
4/18/2017		
4/19/2017		
4/25/2017	4	
7/13/2017	4	
10/10/2017	4	
6/12/2018	4	
6/13/2018		
10/9/2018		
10/10/2018	4.2	
1/29/2019		4.51
3/25/2019		4.4
3/26/2019	3.8	
9/10/2019	4.1	4.2
3/9/2020		
3/10/2020	4.1	4
9/16/2020	5.1	3.7
9/17/2020		
3/23/2021		4.1
3/24/2021	5.7	
8/23/2021		
8/24/2021		3.9
8/25/2021	4.9	
2/22/2022	4	3.3
2/23/2022		
8/2/2022	4.9	2.8
8/3/2022		
8/4/2022		

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWC-7	MGWA-5 (bg)	MGWA-6 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	0.046 (J)	0.103 (J)	0.394	0.132 (J)	0.091 (J)				
5/6/2016						0.086 (J)	0.28 (J)	0.088 (J)	
6/20/2016	<0.1			0.05 (J)					0.06 (J)
6/21/2016		0.1 (J)	0.49		0.08 (J)	0.23 (J)	0.36	0.19 (J)	
8/15/2016	<0.1	0.11 (J)	0.44	0.1 (J)	<0.1				0.1 (J)
8/16/2016						<0.1	0.27	0.087 (J)	
9/28/2016	<0.1	0.1 (J)	0.4	0.11 (J)	0.084 (J)		0.26		0.097 (J)
9/29/2016						0.082 (J)		<0.1	
11/16/2016	<0.1	0.091 (J)	0.36	0.093 (J)	0.084 (J)	0.087 (J)	0.24	<0.1	0.12 (J)
1/16/2017	<0.1								
1/17/2017		<0.1	0.2	0.095 (J)	0.099 (J)	0.086 (J)			0.11 (J)
1/18/2017								<0.1	
1/19/2017							0.22		
3/2/2017	0.12 (J)	0.16 (J)	0.36	0.16 (J)	0.15 (J)	0.15 (J)	0.27	0.15 (J)	0.18 (J)
4/18/2017	<0.1	<0.1	0.29	<0.1	<0.1	<0.1	0.2		0.11 (J)
4/19/2017								<0.1	
4/25/2017									
7/13/2017									0.12 (J)
10/10/2017	<0.1	<0.1	0.28	<0.1	<0.1	<0.1	0.18 (J)	<0.1	0.086 (J)
3/29/2018	<0.1		0.23	0.084 (J)	<0.1		0.16 (J)		<0.1
3/30/2018		0.088 (J)				<0.1		<0.1	
6/12/2018	<0.1			<0.1					0.16 (J)
6/13/2018		0.15 (J)	0.2		<0.1	<0.1	0.14 (J)	<0.1	
10/9/2018	<0.1			0.086 (J)					0.16 (J)
10/10/2018		0.11 (J)	0.23		<0.1	<0.1	0.17 (J)	0.085 (J)	
1/29/2019									
3/25/2019	<0.1			0.072 (J)					0.087 (J)
3/26/2019		0.088 (J)	0.19 (J)		0.065 (J)	0.072 (J)	0.16	0.076 (J)	
9/10/2019	0.044 (J)	0.083 (J)	0.15	0.068 (J)	0.076 (J)	0.073 (J)	0.098 (J)	0.07 (J)	0.075 (J)
3/9/2020	0.061 (J)								0.19
3/10/2020		0.084 (J)	0.18	0.055 (J)	0.045 (J)	0.058 (J)	0.086 (J)	0.05 (J)	
9/16/2020	0.042 (J)			0.08 (J)	0.076 (J)			0.076 (J)	0.18
9/17/2020		0.11	0.25			0.083 (J)	0.15		
3/23/2021	0.038 (J)				0.082 (J)				0.081 (J)
3/24/2021		0.11	0.35	0.091 (J)		0.092 (J)	0.27	0.11	
8/23/2021	0.048 (J)								0.12
8/24/2021				0.1	0.1	0.11		0.095 (J)	
8/25/2021		0.038 (J)	0.15				0.097 (J)		
2/22/2022	<0.1			<0.1	0.034 (J)		0.047 (J)		<0.1
2/23/2022		0.05 (J)	0.22			0.086 (J)		0.075 (J)	
8/2/2022	<0.1			0.066 (J)	0.055 (J)				0.065 (J)
8/3/2022			0.2			0.079 (J)	0.12		
8/4/2022		0.087 (J)						0.072 (J)	

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	0.14 (J)	
8/15/2016		
8/16/2016	0.29	
9/28/2016		
9/29/2016	0.26	
11/16/2016	0.25	
1/16/2017		
1/17/2017		
1/18/2017	0.26	
1/19/2017		
3/2/2017	0.28	
4/18/2017		
4/19/2017		
4/25/2017	0.25	
7/13/2017	0.21	
10/10/2017	0.22	
3/29/2018	0.23	
3/30/2018		
6/12/2018	0.23	
6/13/2018		
10/9/2018		
10/10/2018	0.25	
1/29/2019		<0.1
3/25/2019		0.067 (J)
3/26/2019	0.22	
9/10/2019	0.2	0.052 (J)
3/9/2020		
3/10/2020	0.15	0.048 (J)
9/16/2020	0.26	0.078 (J)
9/17/2020		
3/23/2021		0.096 (J)
3/24/2021	0.27	
8/23/2021		
8/24/2021		0.11
8/25/2021	0.19	
2/22/2022	0.093 (J)	<0.1
2/23/2022		
8/2/2022	0.074 (J)	0.052 (J)
8/3/2022		
8/4/2022		

# Prediction Limit

Constituent: pH (SU) Analysis Run 11/10/2022 2:43 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-2	MGWC-1	MGWA-11 (bg)
5/5/2016	5.94	7.13	5.96	7.81	7.4				
5/6/2016						6.85	7.41	6.64	
6/20/2016	5.84 (D)				7.63				7.82
6/21/2016		7.25	6	7.2		6.98	7.41	6.99	
8/15/2016	5.65	7.04	5.26	7.04	7.54				7.52
8/16/2016						6.73	7.33	6.48	
9/28/2016	5.72	7.09	5.66	7	7.45			6.7	7.66
9/29/2016						6.81	7.42		
11/16/2016	5.65	7.6	5.33	6.73	7.39	6.69	7.87	6.66	7.51
1/16/2017	5.52								
1/17/2017		6.99	5.24	6.61	7.23	6.77			7.52
1/18/2017							7.49		
1/19/2017								6.81	
3/2/2017	5.53	6.95	5.21	6.62	7.55	6.79	7.37	6.75	7.5
4/18/2017	5.64	7.02	5.85	6.7	7.43	6.77		6.93	7.75
4/19/2017							7.48		
4/25/2017									
7/13/2017									7.72
10/10/2017		7.27	5.6	6.48	5.62	7	7.29	6.99	
10/11/2017	6.11								6.35
3/29/2018	5.35	6.95		6.46	7.19			6.82	7.42
3/30/2018			5.16			6.68	7.31		
6/12/2018	6.23				7.55				8.02
6/13/2018		7.08	5.79	6.24		6.83	7.37	7.01	
10/9/2018	5.62 (D)				7.8 (D)				7.79 (D)
10/10/2018		7.01 (D)	5.15 (D)	6.12 (D)		6.69 (D)	7.41 (D)	7.04 (D)	
1/28/2019	5.49 (D)								7.4 (D)
1/29/2019		6.55 (D)	5.46 (D)	5.93 (D)	7.63 (D)	6.42 (D)	7.03 (D)	6.87 (D)	
3/25/2019	5.27 (D)				7.44 (D)				7.29 (D)
3/26/2019		6.57 (D)	7.14 (D)	5.19 (D)		5.96 (D)	6.68 (D)	7.01 (D)	
9/10/2019	5.97	6.99	5.1	6.03	7.41	6.67	7.26	7.09	7.54
1/28/2020	5.78	7.17		6.61	7.46				7.4
1/29/2020			5.76			6.68	7.3	7.19	
3/9/2020	5.46								7.58
3/10/2020		7	5.5	6.54	7.3	6.87	7.3	7.11	
9/16/2020	6.37	6.98			7.38		7.16		7.89
9/17/2020			5.22	6.39		6.68		6.95	
12/7/2020		7.2							
12/8/2020						7.04		7.41	
3/23/2021	5	6.74							7.06
3/24/2021			6.71	6.26	6.88	6.73	7.24	7.14	
8/23/2021	6.16								8.12
8/24/2021		7.11			7.78	6.92	7.42		
8/25/2021			5.26	6.85				7.27	
10/26/2021			5.99						
2/22/2022	5.38	7.14			7.57			7.32	7.6
2/23/2022			6.22	6.91		6.98	7.44		
8/2/2022	5.41	7.1			7.45				7.57
8/3/2022				6.86		6.91		7.23	
8/4/2022			6.5				7.37		

# Prediction Limit

Constituent: pH (SU) Analysis Run 11/10/2022 2:43 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	7.61	
8/15/2016		
8/16/2016	7.17	
9/28/2016		
9/29/2016	6.97	
11/16/2016	7.03	
1/16/2017		
1/17/2017		
1/18/2017	7.01	
1/19/2017		
3/2/2017	7.02	
4/18/2017		
4/19/2017		
4/25/2017	7.02	
7/13/2017	7.17	
10/10/2017	7.24	
10/11/2017		
3/29/2018	6.93	
3/30/2018		
6/12/2018	7.29	
6/13/2018		
10/9/2018		
10/10/2018	7.12 (D)	
1/28/2019		
1/29/2019	8.02 (D)	6.93 (D)
3/25/2019		7.1 (D)
3/26/2019	7.29 (D)	
9/10/2019	10.96 (o)	7.15
1/28/2020	7.25	7.36
1/29/2020		
3/9/2020		
3/10/2020	7.53	7.04
9/16/2020	11.03 (o)	6.89
9/17/2020		
12/7/2020		
12/8/2020		
3/23/2021		6.56
3/24/2021	7.15	
8/23/2021		
8/24/2021		7.28
8/25/2021	7.44	
10/26/2021		
2/22/2022	7.41	7.2
2/23/2022		
8/2/2022	7.06	7.27
8/3/2022		
8/4/2022		



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWA-5 (bg)	MGWC-7	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	2.46	17.8	144	4.47	116				
5/6/2016						445	106	94.2	
6/20/2016	2.5			7.7					1
6/21/2016		17	160		170	290	210	95	
8/15/2016	1.9	20	120	7.5	170				0.73 (J)
8/16/2016						270	120	88	
9/28/2016	1.9	21	130	7.8	170		110		<1
9/29/2016						280		94	
11/16/2016	1.7	20	130	6.7	170	280	130	97	<1
1/16/2017	<1								
1/17/2017		19	150	6.7	180			100	<1
1/18/2017						280			
1/19/2017							160		
3/2/2017	1.4	15	160	5.6	180	240	130	100	<1
4/18/2017	1.3	14	180	5.1	160		120	91	<1
4/19/2017						250			
4/25/2017									
7/13/2017									1.4
10/10/2017	1.1	11	260	4.9	180	240	170	110	0.87 (J)
6/12/2018	0.82 (J)			3.8					4.1
6/13/2018		8.7	330		180	220	130	110	
10/9/2018	0.82 (J)			6.7					2.2
10/10/2018		8.7	410		190	220	140	110	
1/29/2019									
3/25/2019	<1			3.4 (J)					<1
3/26/2019		6.3 (J)	420		180	190	130	110	
9/10/2019	1.1	5.6	420	4.7	180	180	140	110	1.8
3/9/2020	4.2								3.4
3/10/2020		5	370	5.2	170	170	140	130	
9/16/2020	0.69 (J)	2.7		3.2		160			3
9/17/2020			380		160		150	120	
3/23/2021	<1	3.2							1.4
3/24/2021			280	3.5	180	180	120	130	
8/23/2021	<1								3.4
8/24/2021		3.5		3.6		160		130	
8/25/2021			420		180		140		
2/22/2022	<1	5.4		3.2			150		1.1
2/23/2022			390		260	180		150	
8/2/2022	<1	2.3		2.7					0.8 (J)
8/3/2022					220		140	130	
8/4/2022			350			150			

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	4	
8/15/2016		
8/16/2016	2.8	
9/28/2016		
9/29/2016	<1	
11/16/2016	3	
1/16/2017		
1/17/2017		
1/18/2017	4.1	
1/19/2017		
3/2/2017	4.6	
4/18/2017		
4/19/2017		
4/25/2017	4.4	
7/13/2017	4.8	
10/10/2017	4.9	
6/12/2018	4.1	
6/13/2018		
10/9/2018		
10/10/2018	2.5	
1/29/2019		7.08
3/25/2019		1.8 (J)
3/26/2019	2.9 (J)	
9/10/2019	2.5	0.6 (J)
3/9/2020		
3/10/2020	7.8	2.4
9/16/2020	4.4	1
9/17/2020		
3/23/2021		1.7
3/24/2021	7.1	
8/23/2021		
8/24/2021		3.3
8/25/2021	6.6	
2/22/2022	4.8	2.1
2/23/2022		
8/2/2022	3.1	2.1
8/3/2022		
8/4/2022		

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWA-6 (bg)	MGWC-8	MGWA-5 (bg)	MGWC-7	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	78	281	287	129	272				
5/6/2016						661	282	380	
6/20/2016	80			156					188
6/21/2016		303	297		356	692	516	392	
8/15/2016	58	310	230	160	330				180
8/16/2016						650	360	360	
9/28/2016	29	170	130	91	180		190		100
9/29/2016						640		380	
11/16/2016	140	340	290	250	330	680	410	420	270
1/16/2017	36								
1/17/2017		310	240	140	310			380	170
1/18/2017						630			
1/19/2017							400		
3/2/2017	78	330	270	170	340	660	360	410	210
4/18/2017	16	290	310	140	300		360	360	160
4/19/2017						600			
4/25/2017									
7/13/2017									150
10/10/2017	78	310	450	190	340	600	480	400	210
6/12/2018	62			180					150
6/13/2018		230	600		320	570	390	320	
10/9/2018	68			170					150
10/10/2018		300	410		270	470	260	300	
1/29/2019									
3/25/2019	54			150					210
3/26/2019		290	630		320	530	370	370	
9/10/2019	14	260	660	110	260	470	360	360	160
3/9/2020	56								190
3/10/2020		300	600	170	370	540	450	390	
9/16/2020	44	300		150		530			150
9/17/2020			740		320		460	410	
3/23/2021	53	300							220
3/24/2021			530	150	330	490	380	430	
8/23/2021	55								200
8/24/2021		300		160		510		450	
8/25/2021			720		390		470		
2/22/2022	38	300		150			420		210
2/23/2022			630		390	490		450	
8/2/2022	65	200		270					210
8/3/2022					400		440	430	
8/4/2022			620			480			

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/10/2022 2:43 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
5/5/2016		
5/6/2016		
6/20/2016		
6/21/2016	177	
8/15/2016		
8/16/2016	160	
9/28/2016		
9/29/2016	190	
11/16/2016	240	
1/16/2017		
1/17/2017		
1/18/2017	180	
1/19/2017		
3/2/2017	170	
4/18/2017		
4/19/2017		
4/25/2017	170	
7/13/2017	150	
10/10/2017	160	
6/12/2018	170	
6/13/2018		
10/9/2018		
10/10/2018	48	
1/29/2019		280
3/25/2019		250
3/26/2019	180	
9/10/2019	140	230
3/9/2020		
3/10/2020	170	260
9/16/2020	190	320
9/17/2020		
3/23/2021		270
3/24/2021	190	
8/23/2021		
8/24/2021		280
8/25/2021	230	
2/22/2022	190	270
2/23/2022		
8/2/2022	150	97.5 (D)
8/3/2022		
8/4/2022		

FIGURE E.

# Appendix III Trend Tests - Significant Results

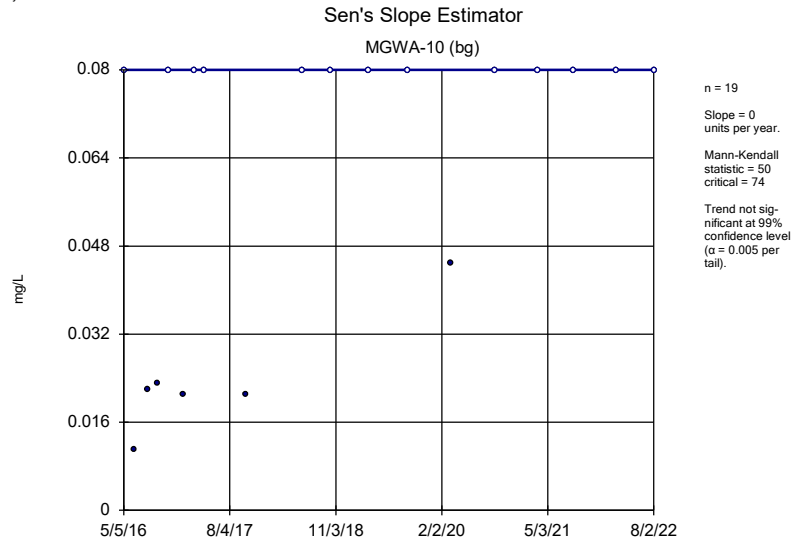
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 2:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-6 (bg)	-0.0181	-113	-74	Yes	19	21.05	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1556	75	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2825	-119	-74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.08031	127	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.6102	86	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.2267	-95	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.19	-147	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.4452	-30	-25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.728	-143	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.6359	-121	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.3476	81	74	Yes	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.04044	-110	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.2711	-103	-74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.6906	-109	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-3.198	-137	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-25.14	-144	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	7.171	130	74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	51.84	106	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-33.49	-123	-74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	78.28	109	74	Yes	19	0	n/a	n/a	0.01	NP

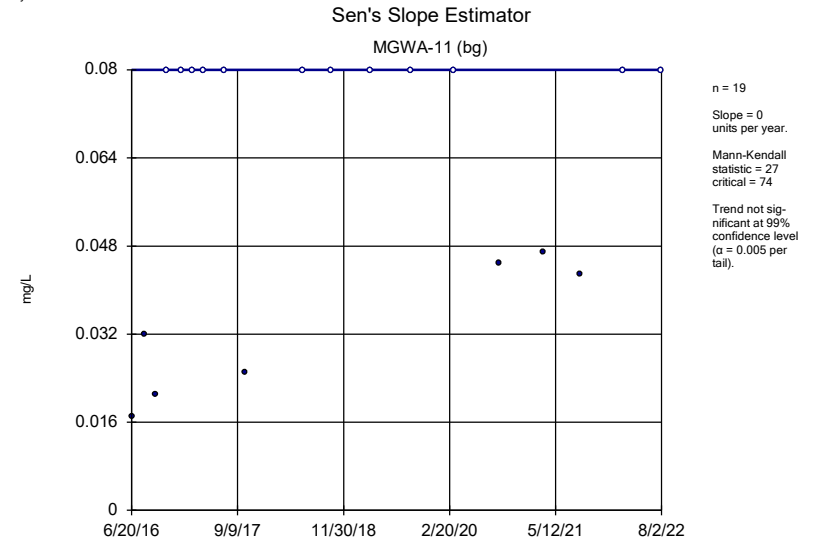
# Appendix III Trend Tests - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 2:52 PM

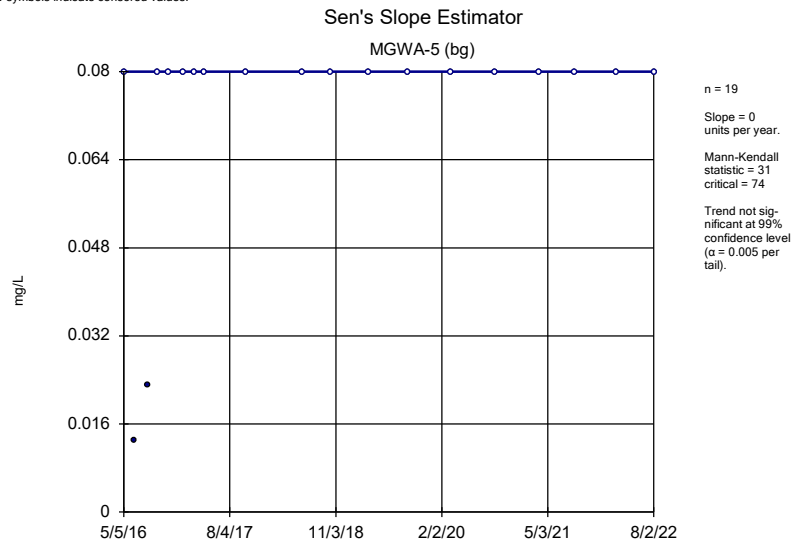
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	50	74	No	19	68.42	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	27	74	No	19	63.16	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	31	74	No	19	89.47	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-0.0181</b>	<b>-113</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>21.05</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWA-6A (bg)	0	4	25	No	9	77.78	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-1</b>	<b>0.1556</b>	<b>75</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>-0.2825</b>	<b>-119</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWC-3	-0.005228	-10	-74	No	19	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.08031</b>	<b>127</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.6102</b>	<b>86</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWA-10 (bg)	0	10	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.05739	-23	-74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.2267</b>	<b>-95</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-1.19</b>	<b>-147</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWA-6A (bg)</b>	<b>-0.4452</b>	<b>-30</b>	<b>-25</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-1	0	-33	-74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>-1.728</b>	<b>-143</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MGWC-3	0	55	74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.6359</b>	<b>-121</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>MGWC-8</b>	<b>0.3476</b>	<b>81</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	MGWA-10 (bg)	0	-42	-81	No	20	65	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	0	3	81	No	20	10	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.005052	-53	-81	No	20	20	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.005018	-47	-81	No	20	30	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0.00278	4	25	No	9	22.22	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.04044</b>	<b>-110</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.2711</b>	<b>-103</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>31.58</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-11 (bg)	0.1535	54	74	No	19	31.58	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.6906</b>	<b>-109</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-3.198</b>	<b>-137</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-6A (bg)	0.04466	1	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	3.306	43	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>-25.14</b>	<b>-144</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>MGWC-3</b>	<b>7.171</b>	<b>130</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWC-7	4.244	72	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-8</b>	<b>51.84</b>	<b>106</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWA-10 (bg)	-4.115	-44	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	2.803	24	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	2.728	22	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	-0.8063	-28	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	-1.629	-2	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	12.56	43	74	No	19	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>-33.49</b>	<b>-123</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	MGWC-3	8.178	52	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	11.15	53	74	No	19	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>78.28</b>	<b>109</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>



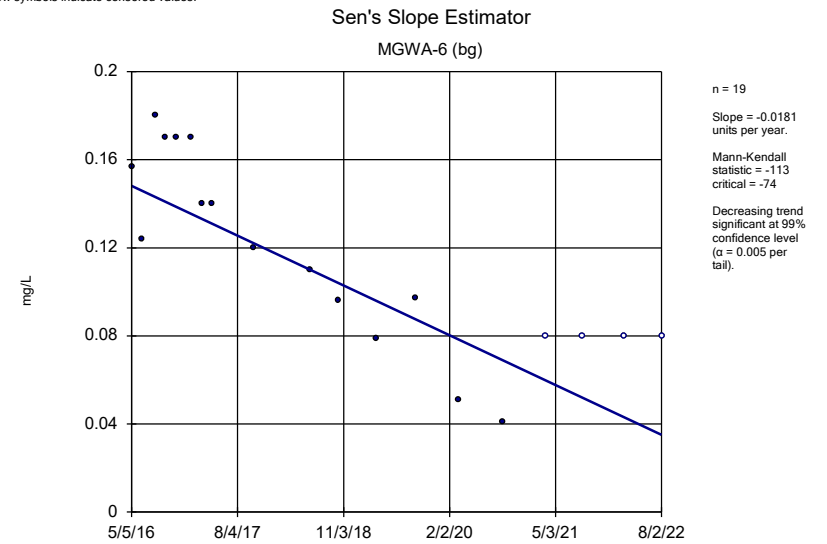
Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

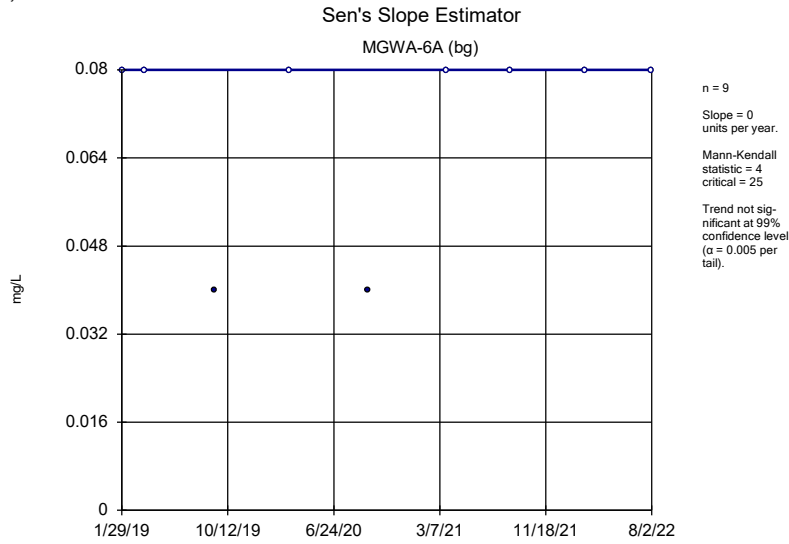


Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

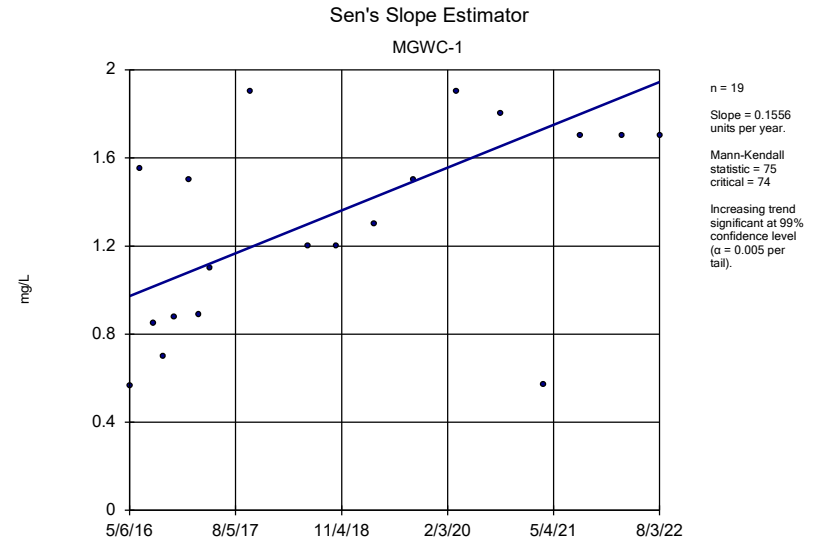


Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

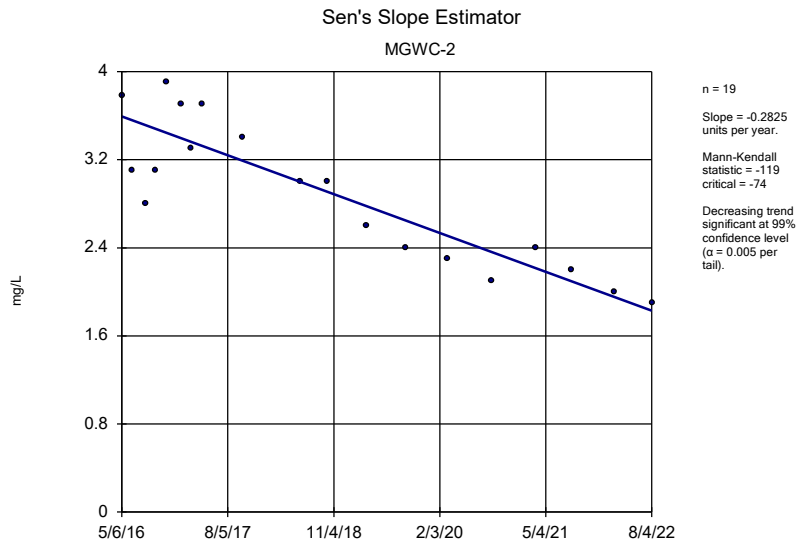




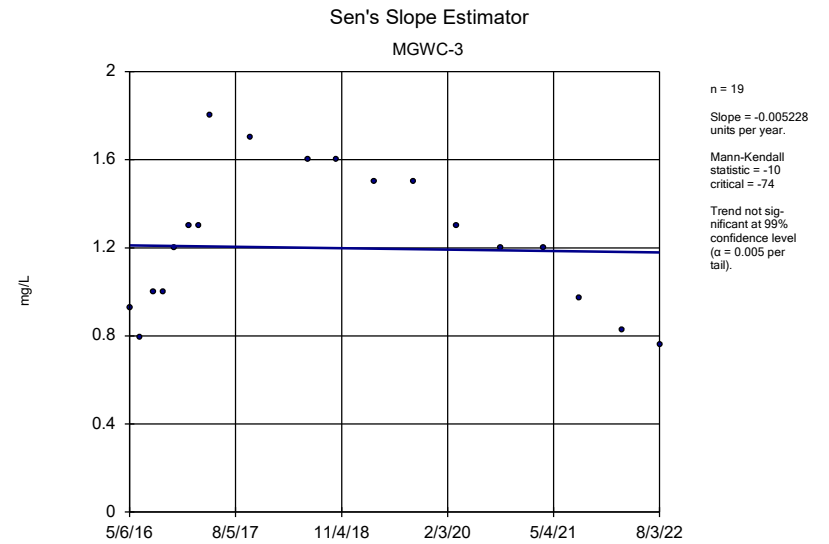
Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

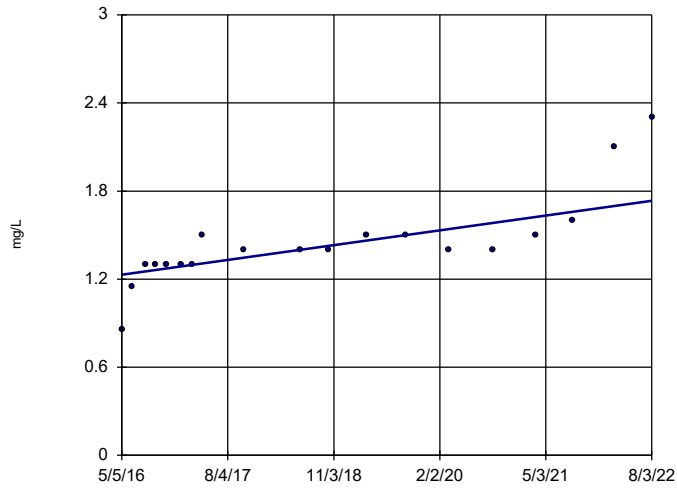


Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



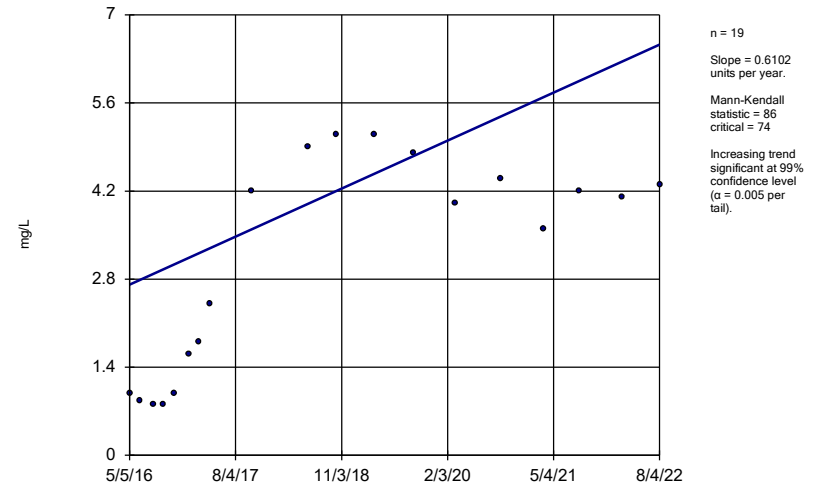
Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWC-7



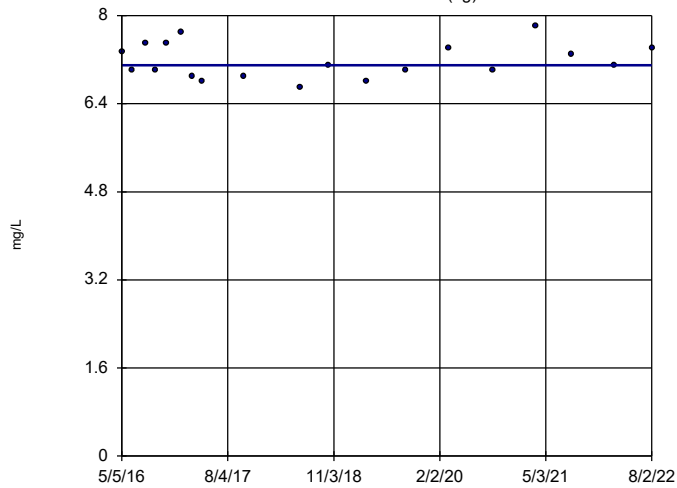
Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWC-8



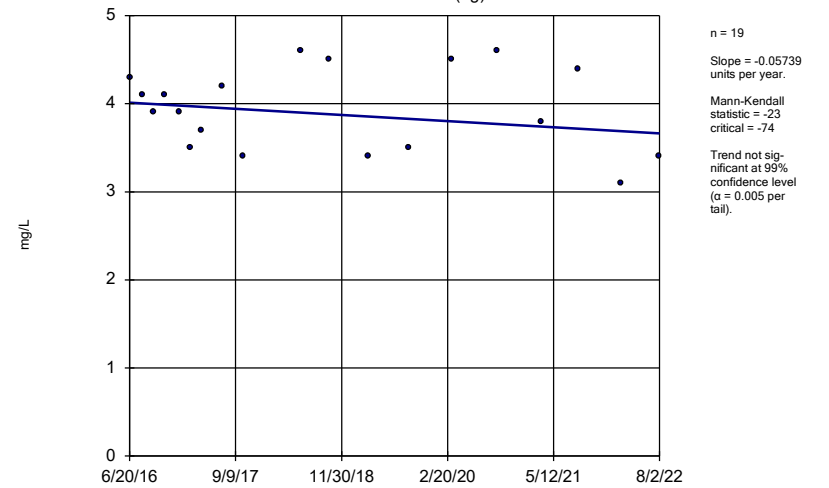
Constituent: Boron Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-10 (bg)



Constituent: Chloride Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

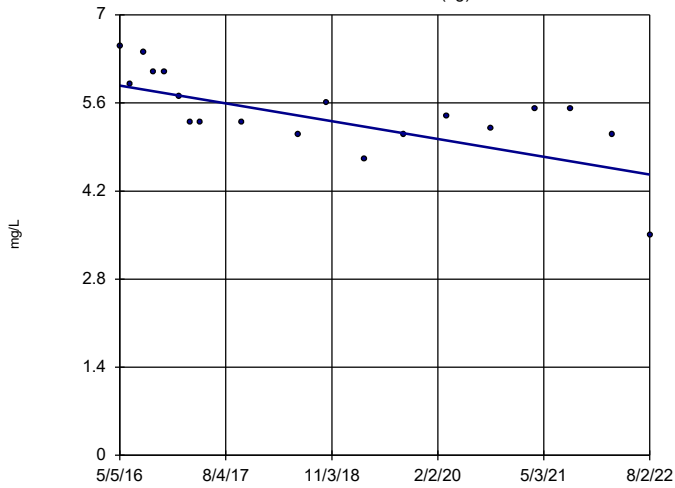
### Sen's Slope Estimator MGWA-11 (bg)



Constituent: Chloride Analysis Run 11/10/2022 2:45 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-5 (bg)

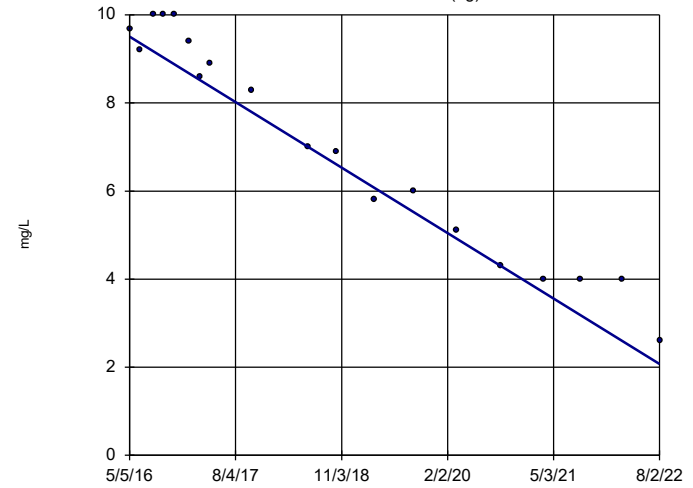


n = 19  
 Slope = -0.2267  
 units per year.  
 Mann-Kendall  
 statistic = -95  
 critical = -74  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

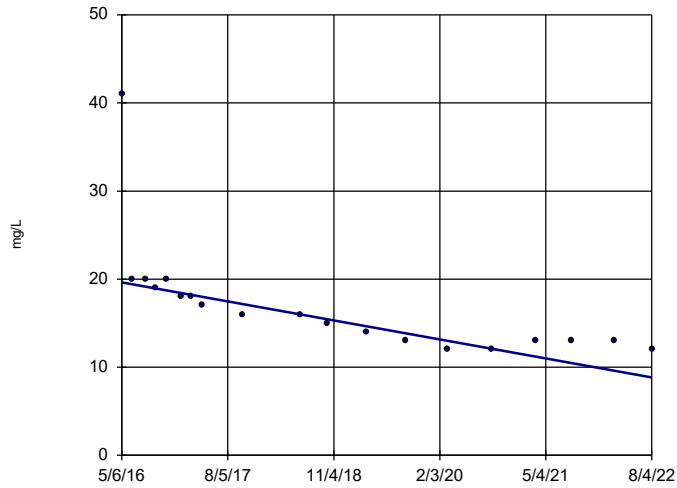
Constituent: Chloride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6 (bg)



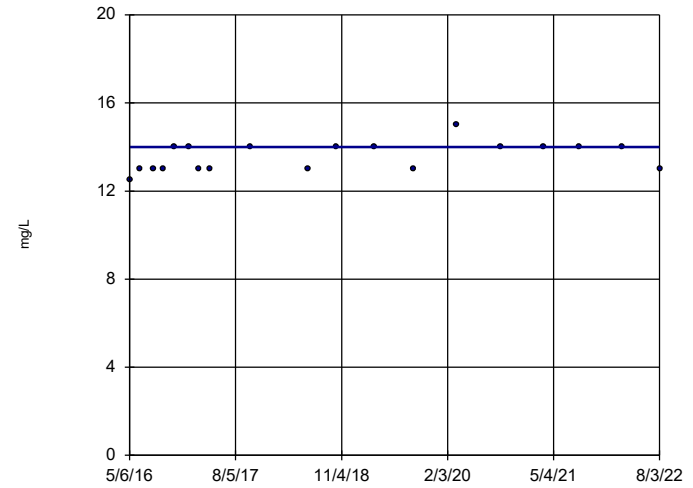
### Sen's Slope Estimator MGWC-2



n = 19  
 Slope = -1.728  
 units per year.  
 Mann-Kendall  
 statistic = -143  
 critical = -74  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

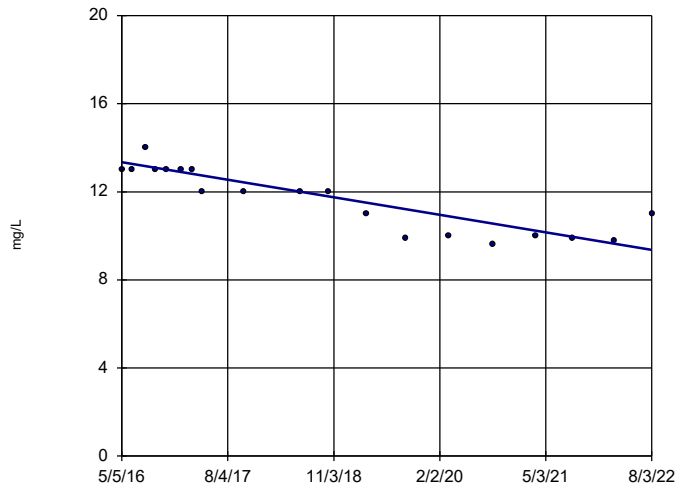
### Sen's Slope Estimator MGWC-3



n = 19  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 55  
 critical = 74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

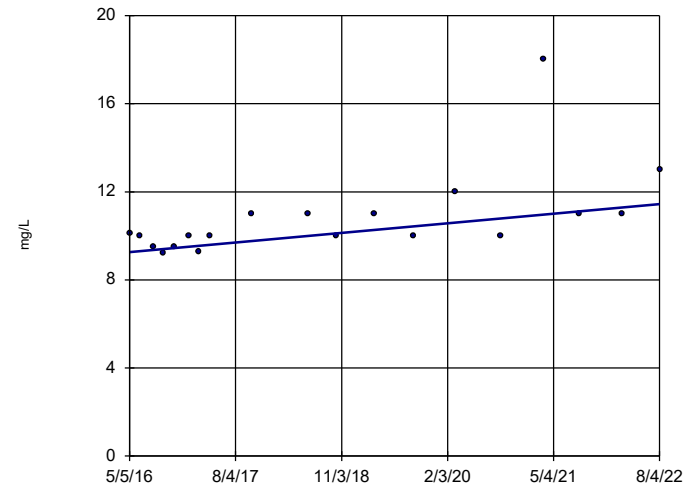
### Sen's Slope Estimator MGWC-7



n = 19  
 Slope = -0.6359  
 units per year.  
 Mann-Kendall  
 statistic = -121  
 critical = -74  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

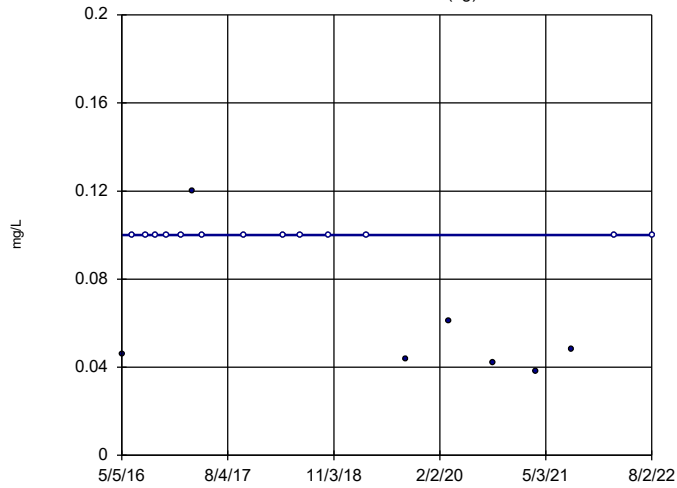
### Sen's Slope Estimator MGWC-8



n = 19  
 Slope = 0.3476  
 units per year.  
 Mann-Kendall  
 statistic = 81  
 critical = 74  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

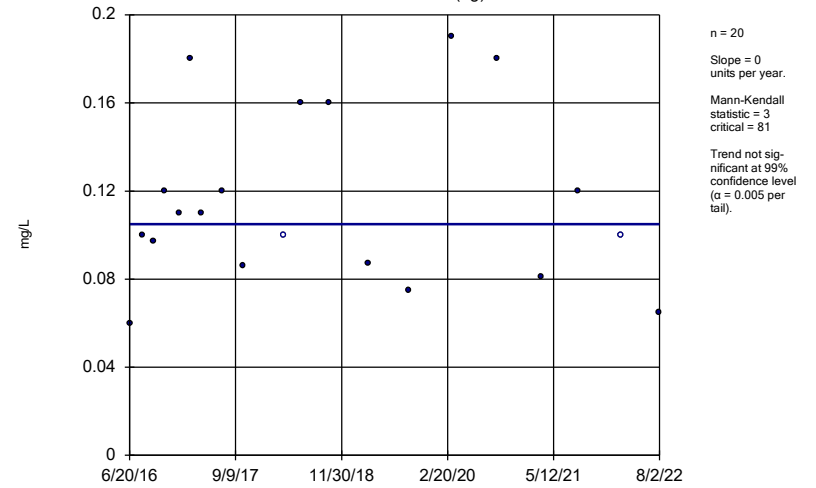
Constituent: Chloride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-10 (bg)



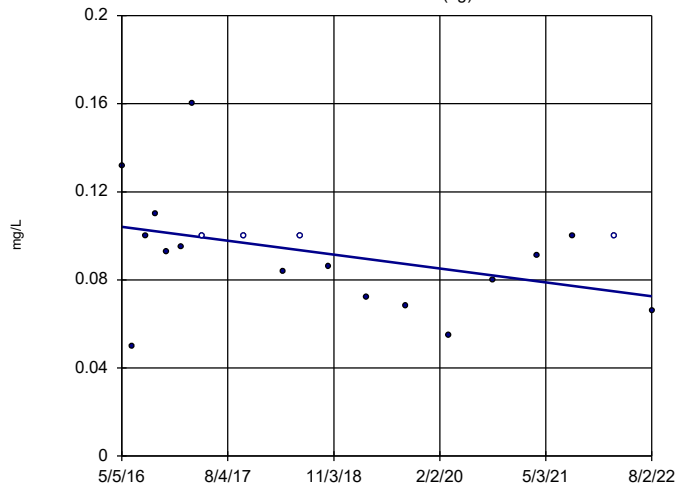
Constituent: Fluoride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-11 (bg)



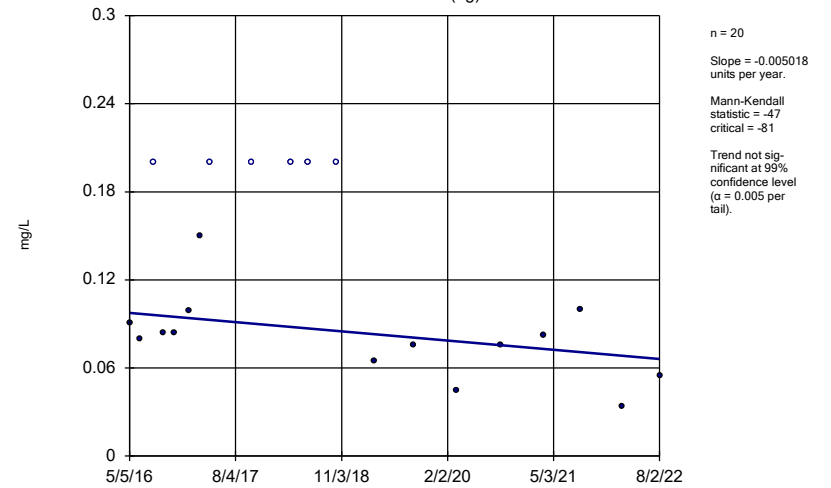
Constituent: Fluoride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-5 (bg)



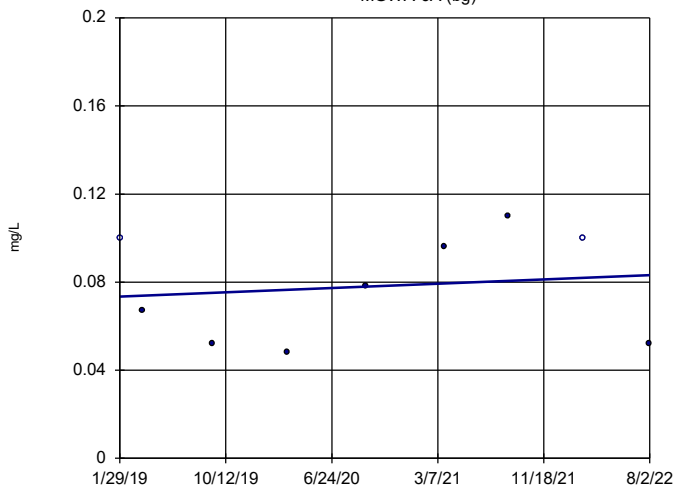
Constituent: Fluoride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWA-6 (bg)



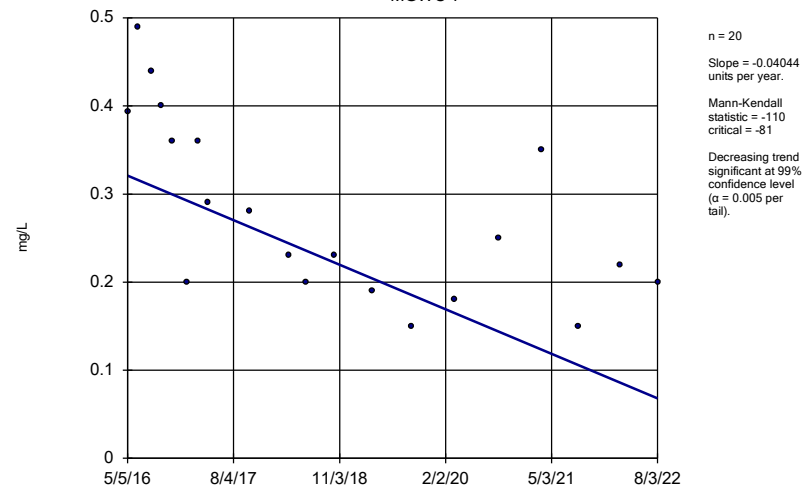
Constituent: Fluoride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-6A (bg)



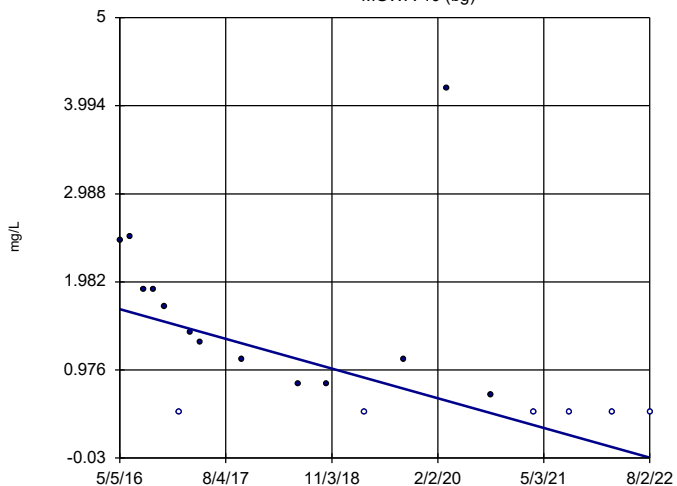
Constituent: Fluoride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-7



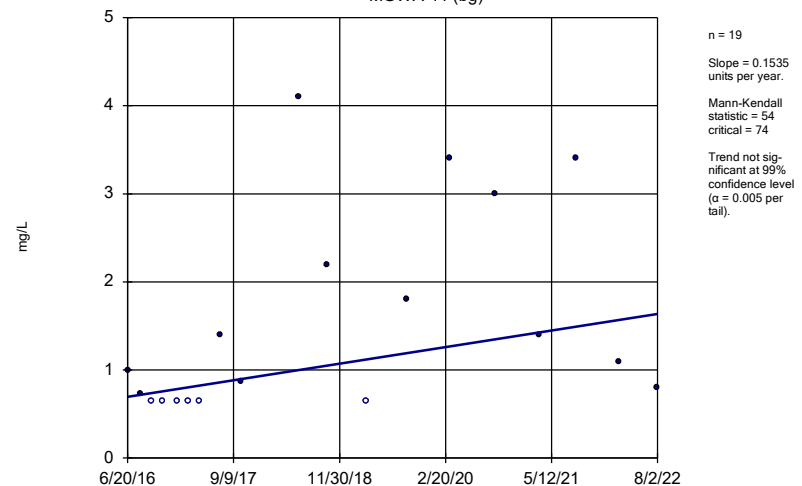
Constituent: Fluoride Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-10 (bg)



Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

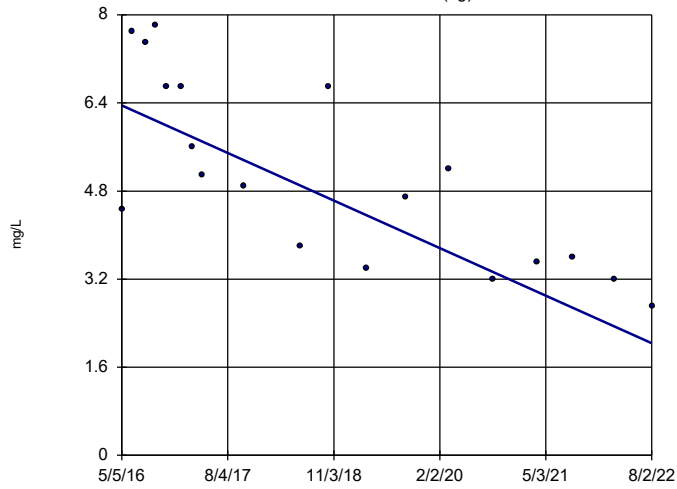
Sen's Slope Estimator  
MGWA-11 (bg)



Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-5 (bg)

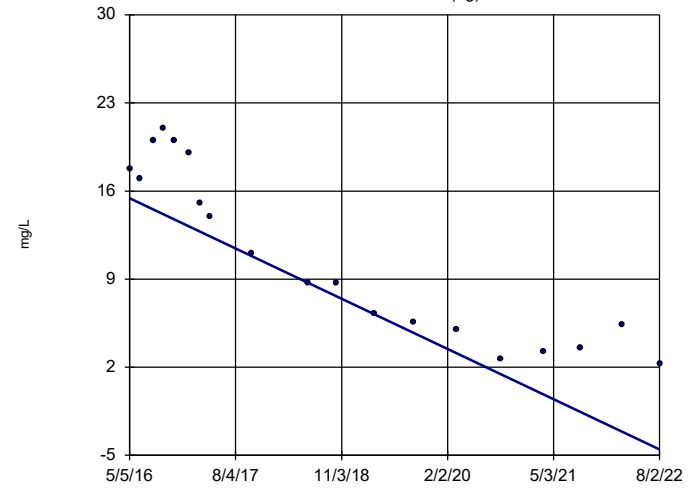


n = 19  
 Slope = -0.6906  
 units per year.  
 Mann-Kendall  
 statistic = -109  
 critical = -74  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6 (bg)

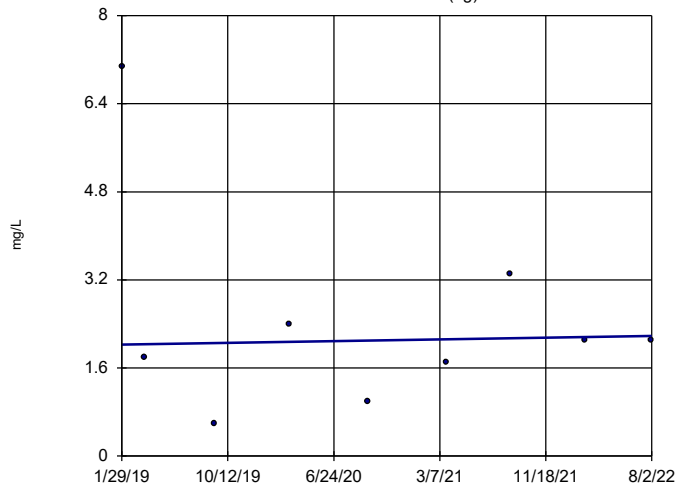


n = 19  
 Slope = -3.198  
 units per year.  
 Mann-Kendall  
 statistic = -137  
 critical = -74  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6A (bg)

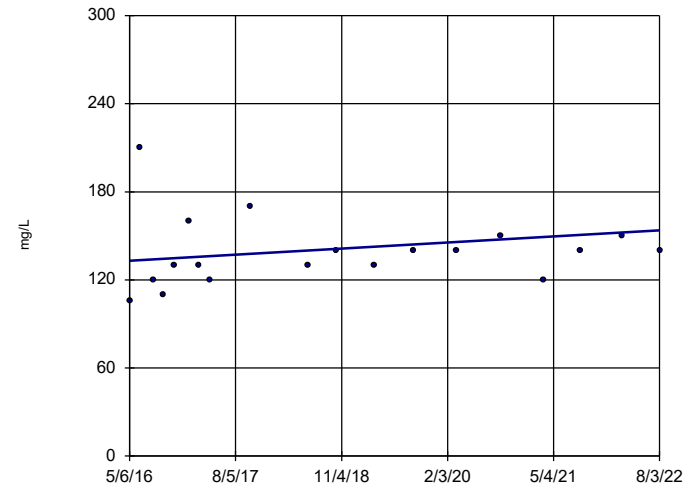


n = 9  
 Slope = 0.04466  
 units per year.  
 Mann-Kendall  
 statistic = 1  
 critical = 25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

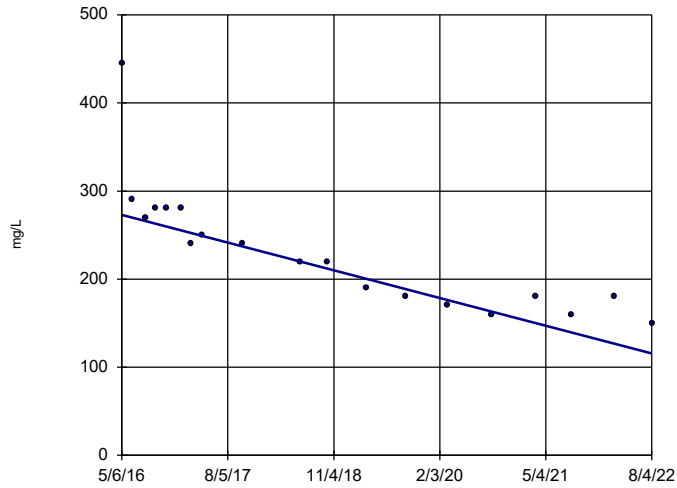
MGWC-1



n = 19  
 Slope = 3.306  
 units per year.  
 Mann-Kendall  
 statistic = 43  
 critical = 74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

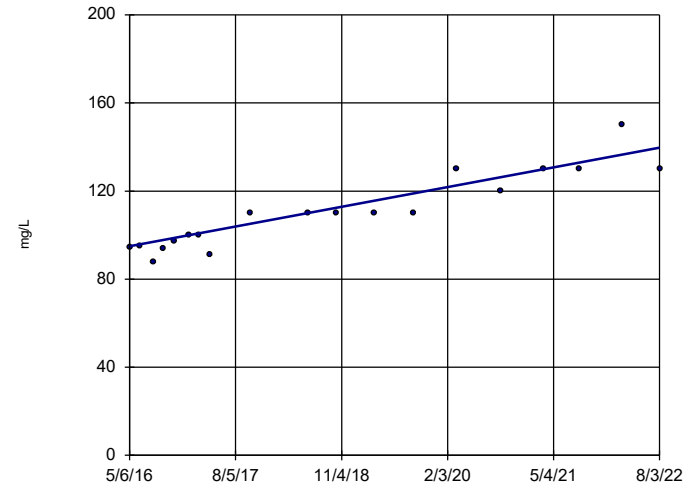
### Sen's Slope Estimator MGWC-2



n = 19  
 Slope = -25.14  
 units per year.  
 Mann-Kendall  
 statistic = -144  
 critical = -74  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

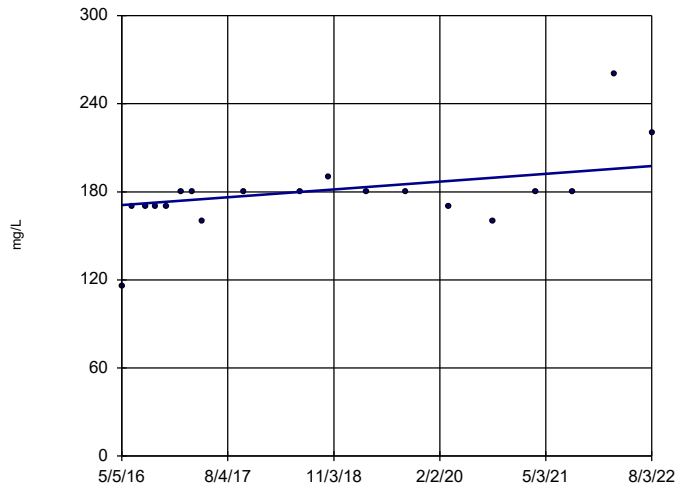
### Sen's Slope Estimator MGWC-3



n = 19  
 Slope = 7.171  
 units per year.  
 Mann-Kendall  
 statistic = 130  
 critical = 74  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

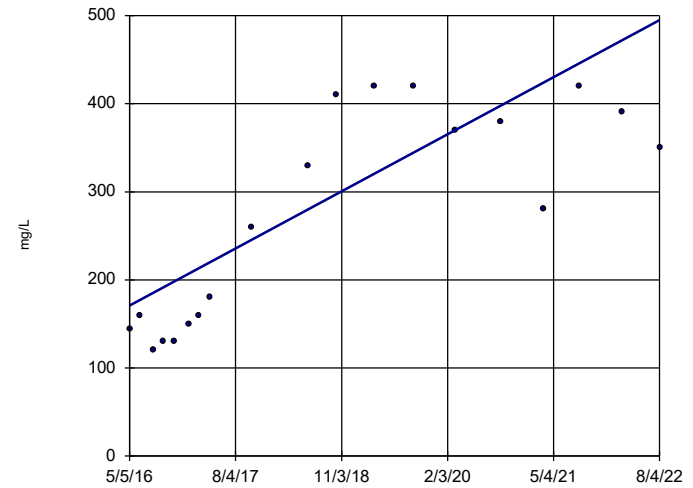
### Sen's Slope Estimator MGWC-7



n = 19  
 Slope = 4.244  
 units per year.  
 Mann-Kendall  
 statistic = 72  
 critical = 74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator MGWC-8



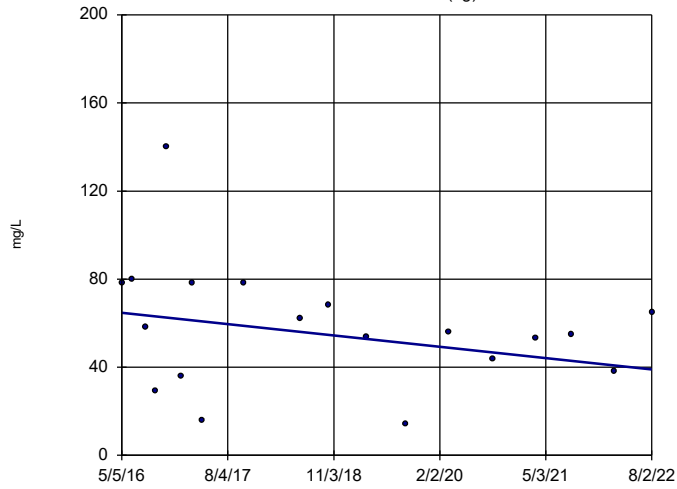
n = 19  
 Slope = 51.84  
 units per year.  
 Mann-Kendall  
 statistic = 106  
 critical = 74  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

MGWA-10 (bg)

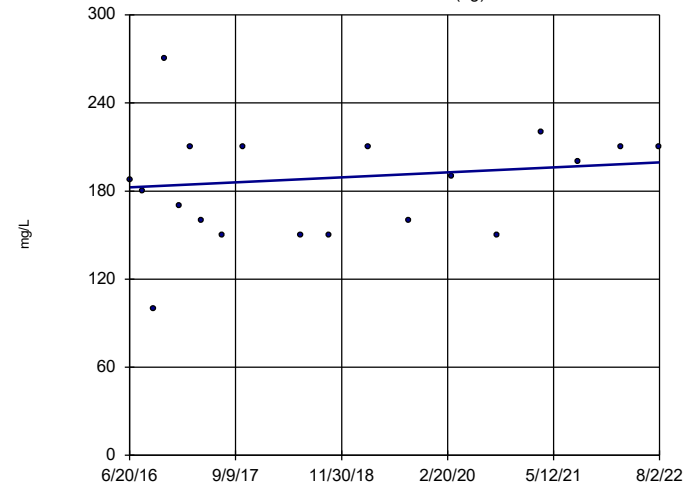


n = 19  
 Slope = -4.115  
 units per year.  
 Mann-Kendall  
 statistic = -44  
 critical = -74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: TDS Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-11 (bg)

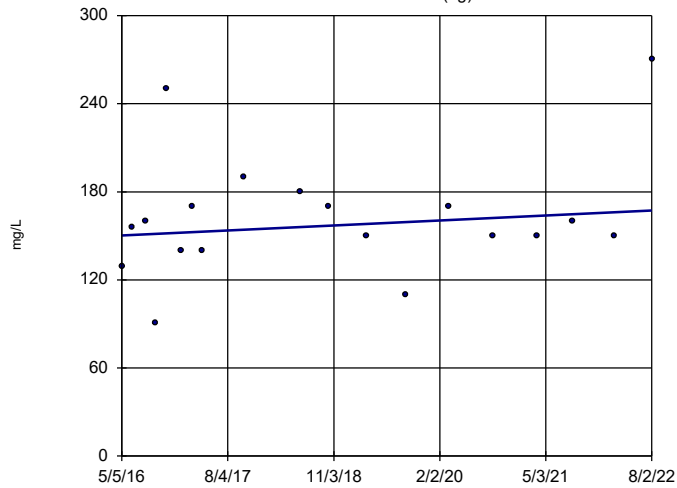


n = 19  
 Slope = 2.803  
 units per year.  
 Mann-Kendall  
 statistic = 24  
 critical = 74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: TDS Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-5 (bg)

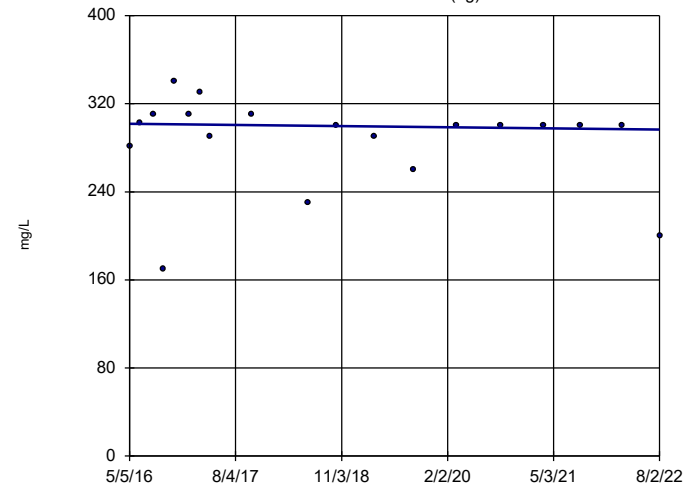


n = 19  
 Slope = 2.728  
 units per year.  
 Mann-Kendall  
 statistic = 22  
 critical = 74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: TDS Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6 (bg)



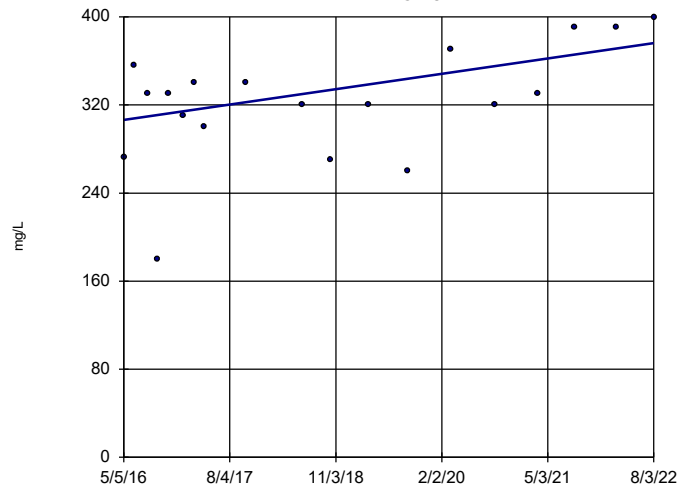
n = 19  
 Slope = -0.8063  
 units per year.  
 Mann-Kendall  
 statistic = -28  
 critical = -74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: TDS Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

MGWC-7

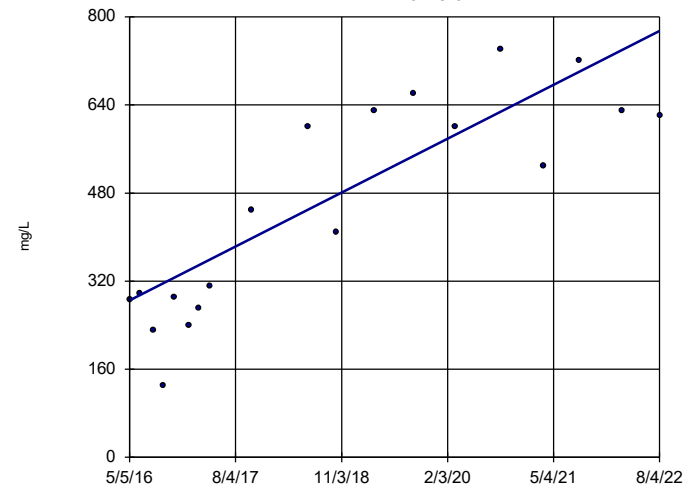


n = 19  
Slope = 11.15  
units per year.  
Mann-Kendall  
statistic = 53  
critical = 74  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: TDS Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWC-8



n = 19  
Slope = 78.28  
units per year.  
Mann-Kendall  
statistic = 109  
critical = 74  
Increasing trend  
significant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: TDS Analysis Run 11/10/2022 2:46 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

FIGURE F.

# Upper Tolerance Limits Summary Table

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 2:59 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.002	n/a	n/a	n/a	n/a	76	90.79	n/a	0.02028	NP Inter(NDs)
Arsenic (mg/L)	0.014	n/a	n/a	n/a	n/a	86	36.05	n/a	0.01214	NP Inter(normality)
Barium (mg/L)	0.13	n/a	n/a	n/a	n/a	94	0	n/a	0.008054	NP Inter(normality)
Beryllium (mg/L)	0.0025	n/a	n/a	n/a	n/a	84	94.05	n/a	0.01345	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	n/a	n/a	94	98.94	n/a	0.008054	NP Inter(NDs)
Chromium (mg/L)	0.0063	n/a	n/a	n/a	n/a	84	71.43	n/a	0.01345	NP Inter(NDs)
Cobalt (mg/L)	0.0025	n/a	n/a	n/a	n/a	93	73.12	n/a	0.008478	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.133	n/a	n/a	n/a	n/a	95	0	No	0.05	Inter
Fluoride (mg/L)	0.19	n/a	n/a	n/a	n/a	89	30.34	n/a	0.01041	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	76	93.42	n/a	0.02028	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	94	29.79	n/a	0.008054	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	84	96.43	n/a	0.01345	NP Inter(NDs)
Molybdenum (mg/L)	0.015	n/a	n/a	n/a	n/a	84	61.9	n/a	0.01345	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	64	90.63	n/a	0.03752	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	84	82.14	n/a	0.01345	NP Inter(NDs)

FIGURE G.

<b>PLANT MCINTOSH AP 1 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006		0.002	0.006
Arsenic, Total (mg/L)	0.01		0.014	0.014
Barium, Total (mg/L)	2		0.13	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005
Chromium, Total (mg/L)	0.1		0.0063	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0025	0.006
Combined Radium, Total (pCi/L)	5		1.13	5
Fluoride, Total (mg/L)	4		0.19	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.015	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

\*Grey cell indicates background is higher than MCL or CCR-Rule

\*GWPS = Groundwater Protection Standard

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residuals

FIGURE H.



# Confidence Intervals - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 3:48 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-7	0.009999	0.007211	0.006	Yes	21	0.002527	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01617	0.007699	0.006	Yes	21	0.007674	0	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	21	0.01973	0	No	0.01	NP (normality)

# Confidence Intervals - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 3:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Antimony (mg/L)	MGWC-12	0.002	0.0015	0.006	No	17	0.0003993	88.24	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	17	0.0004123	94.12	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	17	0.000007276	94.12	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002834	0.001943	0.014	No	21	0.0008071	0	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001094	0.0006639	0.014	No	21	0.0003749	28.57	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	21	0.0002026	80.95	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.001655	0.001381	0.014	No	21	0.0002966	4.762	x^2	0.01	Param.
Arsenic (mg/L)	MGWC-7	0.0008262	0.0005152	0.014	No	21	0.000285	33.33	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00075	0.014	No	21	0.0001985	71.43	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	21	0.01638	0	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06521	0.04964	2	No	21	0.01411	0	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.0541	0.04851	2	No	21	0.005071	0	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.155	0.1406	2	No	21	0.01307	0	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.014	0.01	2	No	21	0.006775	4.762	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.03939	0.03341	2	No	21	0.005427	0	No	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	19	0.0005322	94.74	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	19	0.0005024	94.74	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001229	0.0006733	0.004	No	19	0.0007274	15.79	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	21	0.0009202	80.95	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.003033	0.001189	0.005	No	21	0.00193	0	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00041	0.005	No	21	0.0006563	90.48	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.00137	0.0005485	0.005	No	21	0.001205	28.57	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.002	0.1	No	19	0.0003671	94.74	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.002	0.1	No	19	0.006185	89.47	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	19	0.0002982	94.74	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	19	0.0002294	94.74	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	19	0.000347	89.47	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.002	0.1	No	19	0.0002524	94.74	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.0004	0.006	No	21	0.001038	61.9	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	21	0.0005452	90.48	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.003281	0.002446	0.006	No	21	0.0007569	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	21	0.0007039	14.29	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>MGWC-7</b>	<b>0.009999</b>	<b>0.007211</b>	<b>0.006</b>	<b>Yes</b>	<b>21</b>	<b>0.002527</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.01617</b>	<b>0.007699</b>	<b>0.006</b>	<b>Yes</b>	<b>21</b>	<b>0.007674</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.706	1.282	5	No	22	0.3954	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7565	0.4456	5	No	21	0.2817	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.7266	0.454	5	No	21	0.247	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.715	1.344	5	No	22	0.3456	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.278	0.9311	5	No	21	0.3147	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	1.985	1.41	5	No	21	0.5214	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.2348	0.143	4	No	20	0.08087	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.2505	0.1822	4	No	20	0.06008	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.1101	0.07275	4	No	20	0.02986	35	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MGWC-3	0.1	0.082	4	No	20	0.036	30	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3358	0.2206	4	No	20	0.1014	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.1134	0.08276	4	No	20	0.02701	15	No	0.01	Param.
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	17	0.0002183	94.12	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	17	0.000302	82.35	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	17	0.0001892	94.12	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01235	0.01025	0.04	No	21	0.0019	4.762	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.02202	0.01621	0.04	No	21	0.005262	0	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.006755	0.005191	0.04	No	21	0.001756	4.762	ln(x)	0.01	Param.
Lithium (mg/L)	MGWC-3	0.01339	0.01139	0.04	No	21	0.001818	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>MGWC-7</b>	<b>0.13</b>	<b>0.112</b>	<b>0.04</b>	<b>Yes</b>	<b>21</b>	<b>0.01973</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	MGWC-8	0.03794	0.02664	0.04	No	21	0.01024	0	No	0.01	Param.
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.002	No	19	0.00003789	89.47	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.002	No	19	0.00003519	89.47	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.002	No	19	0.00002982	94.74	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.002	No	19	0.00002753	94.74	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00021	0.00014	0.002	No	20	0.000881	40	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0011	0.1	No	19	0.005662	21.05	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.0014	0.1	No	19	0.006491	68.42	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	19	0.002636	94.74	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	19	0.002592	94.74	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	15	0.001162	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	15	0.001221	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	15	0.001175	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	15	0.001177	93.33	No	0.01	NP (NDs)

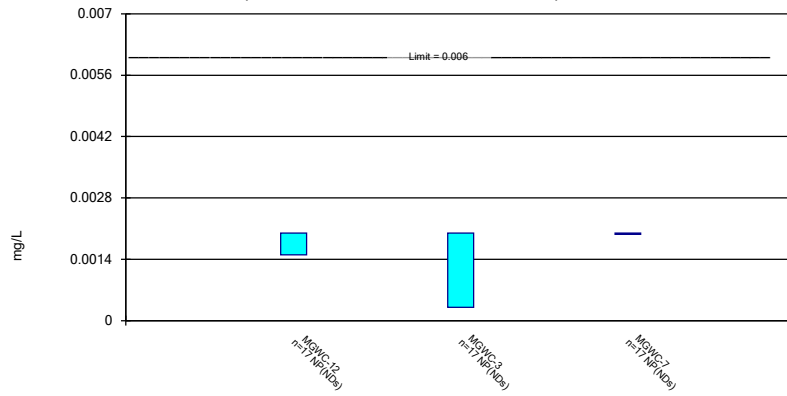
# Confidence Intervals - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 3:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Selenium (mg/L)	MGWC-7	0.005	0.00026	0.05	No	15	0.001224	93.33	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.00038	0.05	No	15	0.001962	73.33	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00016	0.002	No	19	0.0003821	73.68	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	19	0.0002499	89.47	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	19	0.0001812	94.74	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	19	0.0002344	89.47	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.001	0.00016	0.002	No	19	0.0003598	26.32	No	0.01	NP (normality)

### Non-Parametric Confidence Interval

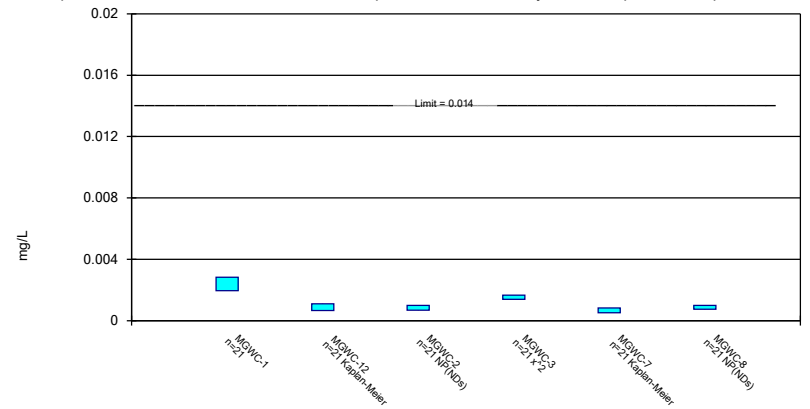
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

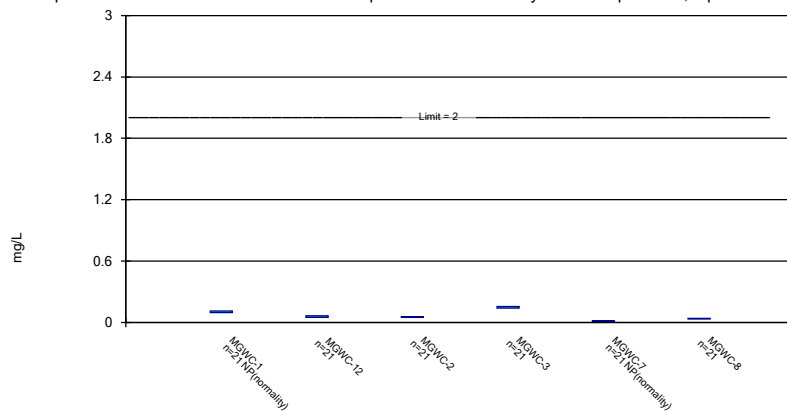
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

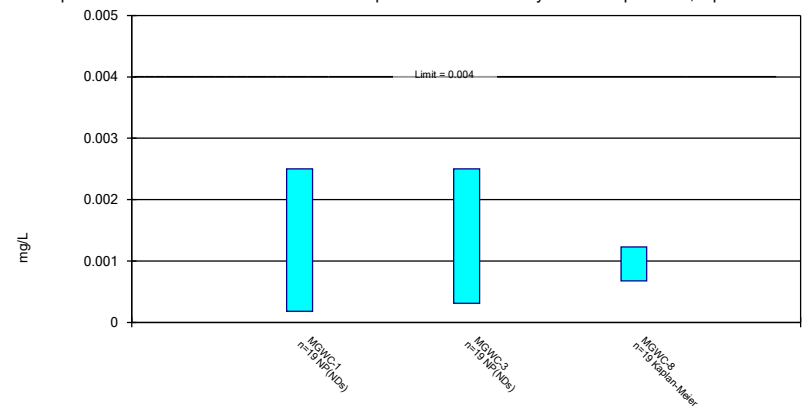
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

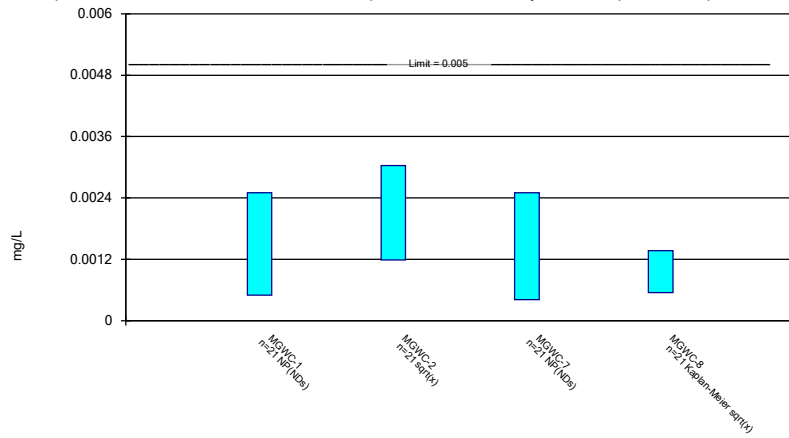
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

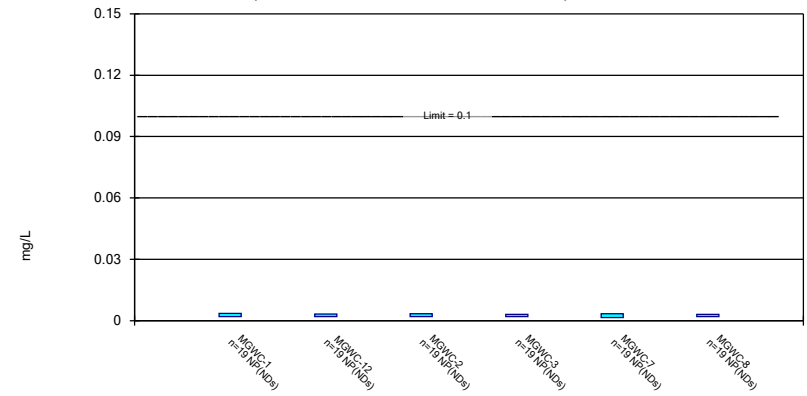
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

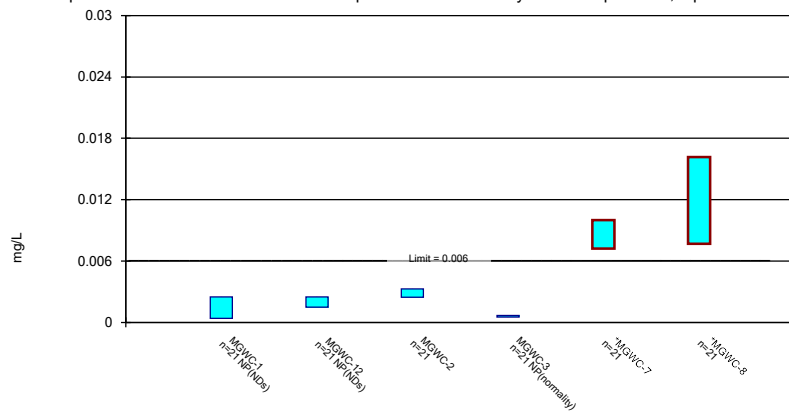
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

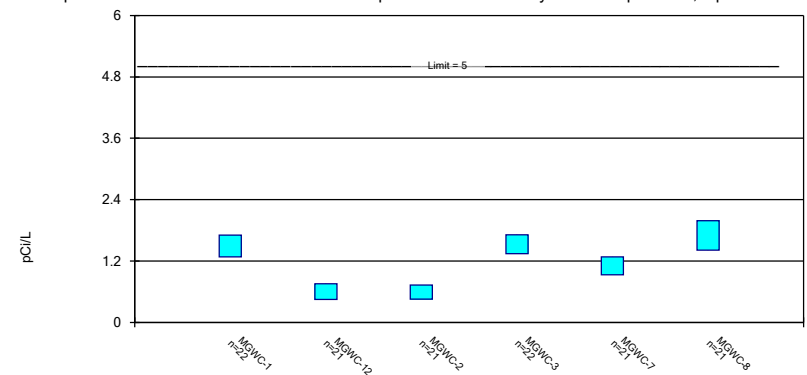
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric Confidence Interval

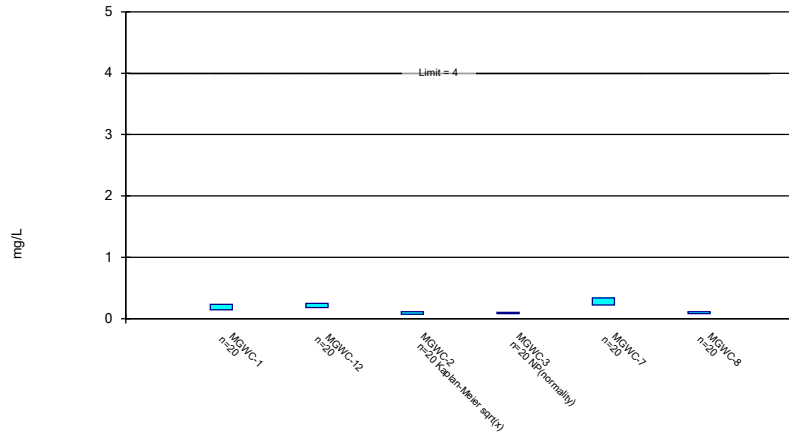
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

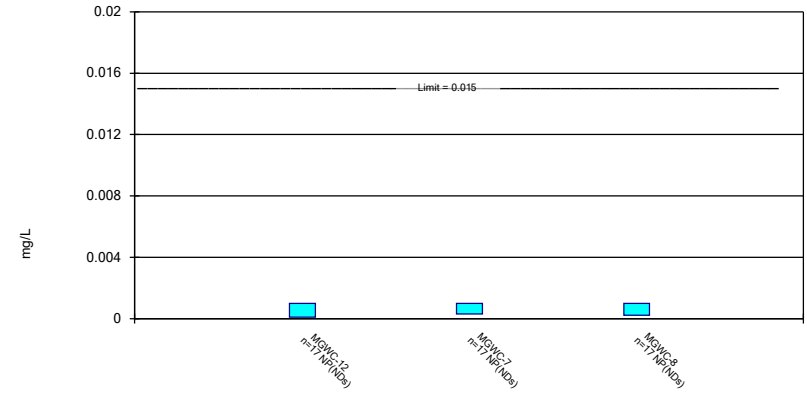
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/10/2022 3:47 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

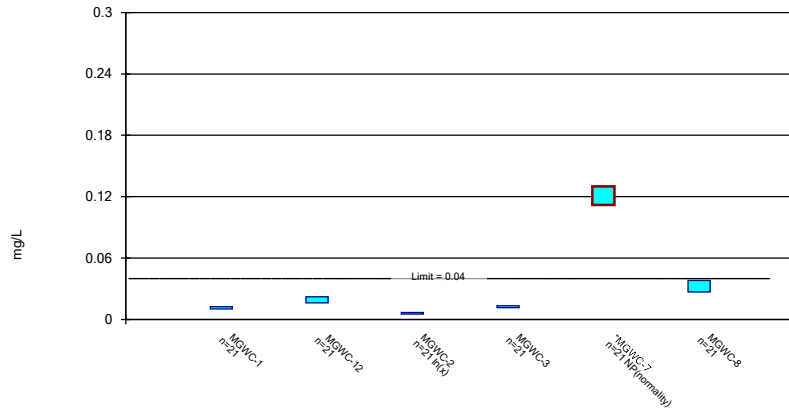
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

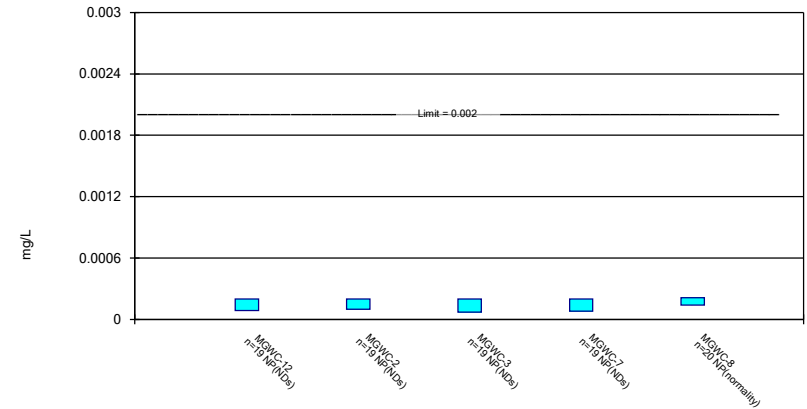
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



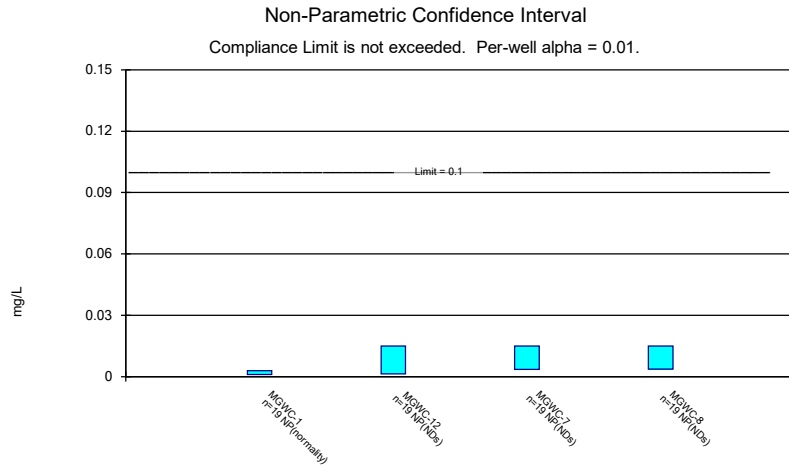
Constituent: Lithium Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

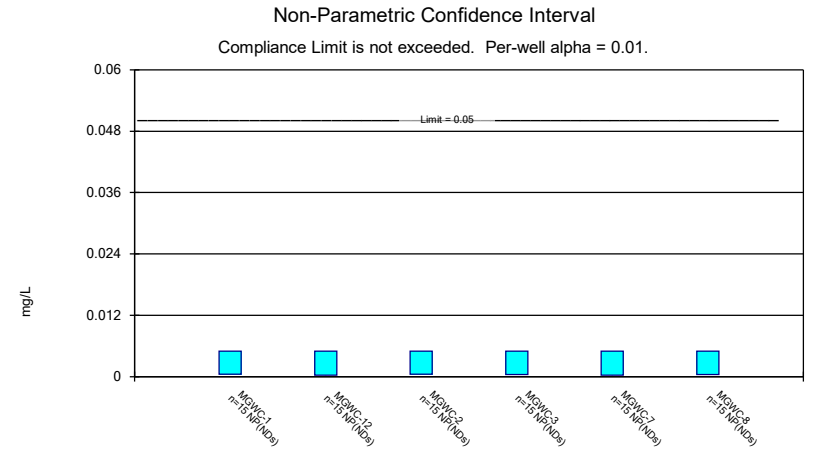
Compliance Limit is not exceeded. Per-well alpha = 0.01.



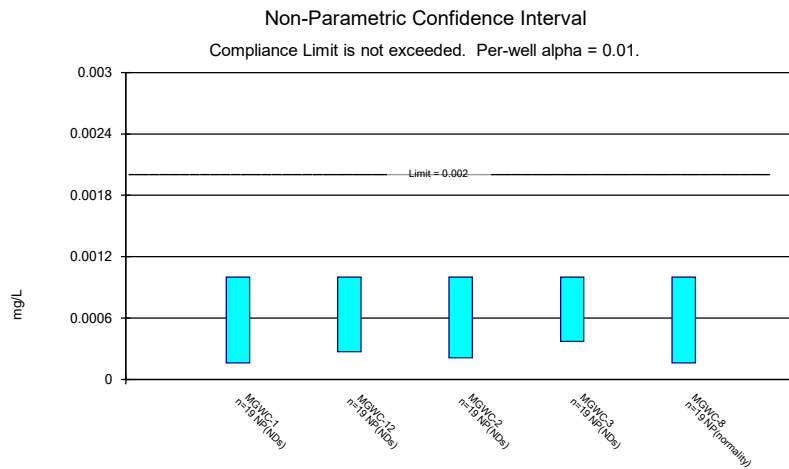
Constituent: Mercury Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Molybdenum Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Selenium Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Thallium Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-3	MGWC-7
5/5/2016			0.00197 (J)
5/6/2016		<0.002	
6/21/2016	0.0004 (J)	0.0003 (J)	<0.002
8/15/2016			<0.002
8/16/2016	<0.002	<0.002	
9/28/2016			<0.002
9/29/2016	<0.002	<0.002	
11/16/2016	<0.002	<0.002	<0.002
1/17/2017		<0.002	<0.002
1/18/2017	<0.002		
3/2/2017	<0.002	<0.002	<0.002
4/18/2017		<0.002	<0.002
4/25/2017	<0.002		
7/13/2017	<0.002		
3/29/2018	<0.002		<0.002
3/30/2018		<0.002	
1/29/2019	<0.002	<0.002	<0.002
1/28/2020	<0.002		<0.002
1/29/2020		<0.002	
3/10/2020	<0.002	<0.002	<0.002
9/16/2020	<0.002		
9/17/2020		<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002
8/24/2021		<0.002	
8/25/2021	<0.002		<0.002
2/22/2022	<0.002		
2/23/2022		<0.002	<0.002
8/2/2022	0.0015 (J)		
8/3/2022		<0.002	<0.002
Mean	0.001876	0.0019	0.001998
Std. Dev.	0.0003993	0.0004123	7.276E-06
Upper Lim.	0.002	0.002	0.002
Lower Lim.	0.0015	0.0003	0.00197



# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.00143 (J)	<0.001
5/6/2016	0.00299 (J)		<0.001	0.00154 (J)		
6/21/2016	0.0047 (J)	0.0015 (J)	<0.001	0.0016 (J)	0.0009 (J)	<0.001
8/15/2016					0.0012 (J)	<0.001
8/16/2016	0.003	0.00082 (J)	<0.001	0.0017		
9/28/2016	0.0036				0.00084 (J)	<0.001
9/29/2016		0.0019	<0.001	0.0013		
11/16/2016	0.003	0.0017	0.00068 (J)	0.0014	<0.001	<0.001
1/17/2017				0.00056 (J)	<0.001	<0.001
1/18/2017		0.00096 (J)	<0.001			
1/19/2017	0.0024					
3/2/2017	0.0027	0.00082 (J)	0.00065 (J)	0.0018	0.0009 (J)	<0.001
4/18/2017	0.0024			0.0018	0.0005 (J)	0.00059 (J)
4/19/2017			<0.001			
4/25/2017		<0.001				
7/13/2017		0.00047 (J)				
3/29/2018	0.0023	0.00053 (J)			0.00066 (J)	
3/30/2018			<0.001	0.0017		<0.001
6/12/2018		0.00063 (J)				
6/13/2018	0.0021		<0.001	0.0015	<0.001	<0.001
10/10/2018	0.0024	0.00098 (J)	<0.001	0.0016	<0.001	<0.001
1/29/2019	0.00255	<0.001	<0.001	0.00143	<0.001	<0.001
3/26/2019	0.002	0.00079 (J)	<0.001	0.0012 (J)	<0.001	<0.001
9/10/2019	0.0018	0.0011	0.00036 (J)	0.0017	0.00074 (J)	0.00056 (J)
1/28/2020		0.00051 (J)			0.00046 (J)	
1/29/2020	0.0021		0.0004 (J)	0.0017		0.00047 (J)
3/10/2020	0.0019	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/2020		<0.001	<0.001			
9/17/2020	0.002			0.0015	0.00045 (J)	<0.001
3/24/2021	0.0024	<0.001	<0.001	0.0018	0.00046 (J)	0.00099 (J)
8/24/2021			<0.001	0.0014		
8/25/2021	0.00092 (J)	<0.001			0.00055 (J)	<0.001
2/22/2022	0.0014	0.00089 (J)				
2/23/2022			<0.001	0.0016	0.0004 (J)	0.00044 (J)
8/2/2022		0.0015				
8/3/2022	0.0015			0.0016	0.00052 (J)	
8/4/2022			<0.001			0.00075 (J)
Mean	0.002389	0.001005	0.000909	0.001497	0.00081	0.0008952
Std. Dev.	0.0008071	0.0003749	0.0002026	0.0002966	0.000285	0.0001985
Upper Lim.	0.002834	0.001094	0.001	0.001655	0.0008262	0.001
Lower Lim.	0.001943	0.0006639	0.00068	0.001381	0.0005152	0.00075

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.039	0.0364
5/6/2016	0.11		0.0605	0.151		
6/21/2016	0.165	0.0439	0.0613	0.174	0.0152	0.0386
8/15/2016					0.015	0.03
8/16/2016	0.094	0.041	0.052	0.13		
9/28/2016	0.1				0.014	0.034
9/29/2016		0.052	0.053	0.14		
11/16/2016	0.096	0.044	0.056	0.14	0.013	0.034
1/17/2017				0.16	0.014	0.038
1/18/2017		0.056	0.06			
1/19/2017	0.12					
3/2/2017	0.097	0.04	0.056	0.15	0.013	0.037
4/18/2017	0.092			0.14	0.011	0.04
4/19/2017			0.051			
4/25/2017		0.042				
7/13/2017		0.043				
3/29/2018	0.095	0.061			0.01	
3/30/2018			0.049	0.13		0.041
6/12/2018		0.063				
6/13/2018	0.096		0.05	0.14	0.0098	0.038
10/10/2018	0.095	0.071	0.046	0.13	0.011	0.035
1/29/2019	0.107	0.06	0.0496	0.138	<0.0025	0.0344
3/26/2019	0.096	0.06	0.048	0.13	0.0086	0.032
9/10/2019	0.11	0.073	0.053	0.15	0.012	0.035
1/28/2020		0.069			0.012	
1/29/2020	0.11		0.051	0.15		0.033
3/10/2020	0.13	0.056	0.049	0.15	0.013	0.036
9/16/2020		0.1	0.048			
9/17/2020	0.11			0.16	0.0091 (J)	0.028
3/24/2021	0.1	0.056	0.049	0.16	0.011	0.054
8/24/2021			0.047	0.16		
8/25/2021	0.11	0.051			0.013	0.031
2/22/2022	0.11	0.067				
2/23/2022			0.046	0.17	0.014	0.036
8/2/2022		0.057				
8/3/2022	0.11			0.15	0.018	
8/4/2022			0.042			0.043
Mean	0.1073	0.05742	0.0513	0.1478	0.01319	0.0364
Std. Dev.	0.01638	0.01411	0.005071	0.01307	0.006775	0.005427
Upper Lim.	0.11	0.06521	0.0541	0.155	0.014	0.03939
Lower Lim.	0.096	0.04964	0.04851	0.1406	0.01	0.03341

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-3	MGWC-8
5/5/2016			<0.0025
5/6/2016	<0.0025	<0.0025	
6/21/2016	<0.0025	<0.0025	0.0004 (J)
8/15/2016			0.00053 (J)
8/16/2016	<0.0025	<0.0025	
9/28/2016	<0.0025		0.00049 (J)
9/29/2016		<0.0025	
11/16/2016	<0.0025	<0.0025	0.0004 (J)
1/17/2017		<0.0025	0.00084 (J)
1/19/2017	<0.0025		
3/2/2017	<0.0025	<0.0025	0.00068 (J)
4/18/2017	<0.0025	<0.0025	0.00067 (J)
3/29/2018	<0.0025		
3/30/2018		<0.0025	0.0015 (J)
6/13/2018	<0.0025	<0.0025	0.0012 (J)
10/10/2018	<0.0025	<0.0025	0.0016 (J)
1/29/2019	<0.0025	<0.0025	<0.0025
1/29/2020	0.00018 (J)	0.00031 (J)	0.0019
3/10/2020	<0.0025	<0.0025	0.0013 (J)
9/17/2020	<0.0025	<0.0025	0.0019 (J)
3/24/2021	<0.0025	<0.0025	<0.0025
8/24/2021		<0.0025	
8/25/2021	<0.0025		0.0015 (J)
2/22/2022	<0.0025		
2/23/2022		<0.0025	0.0014 (J)
8/3/2022	<0.0025	<0.0025	
8/4/2022			0.00064 (J)
Mean	0.002378	0.002385	0.001287
Std. Dev.	0.0005322	0.0005024	0.0007274
Upper Lim.	0.0025	0.0025	0.001229
Lower Lim.	0.00018	0.00031	0.0006733

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-2	MGWC-7	MGWC-8
5/5/2016			<0.0025	0.000784 (J)
5/6/2016	0.000126 (J)	0.00166		
6/21/2016	0.0005 (J)	0.0008 (J)	<0.0025	0.0003 (J)
8/15/2016			<0.0025	<0.0025
8/16/2016	<0.0025	0.0034		
9/28/2016	<0.0025		<0.0025	<0.0025
9/29/2016		0.0027		
11/16/2016	<0.0025	0.0022 (J)	<0.0025	<0.0025
1/17/2017			<0.0025	<0.0025
1/18/2017		0.008		
1/19/2017	<0.0025			
3/2/2017	<0.0025	0.005	<0.0025	<0.0025
4/18/2017	<0.0025		<0.0025	0.00044 (J)
4/19/2017		0.0011 (J)		
3/29/2018	<0.0025		<0.0025	
3/30/2018		0.0016 (J)		0.00058 (J)
6/13/2018	<0.0025	0.0016 (J)	<0.0025	0.00076 (J)
10/10/2018	<0.0025	0.001 (J)	<0.0025	0.00035 (J)
1/29/2019	<0.0025	0.00315	<0.0025	<0.0025
3/26/2019	<0.0025	0.0019 (J)	<0.0025	0.0005 (J)
9/10/2019	0.00017 (J)	0.0011	<0.0025	0.00079 (J)
1/28/2020			<0.0025	
1/29/2020	<0.0025	0.0054		0.0009 (J)
3/10/2020	<0.0025	0.0011 (J)	<0.0025	0.0011 (J)
9/16/2020		0.00053 (J)		
9/17/2020	<0.0025		0.00023 (J)	0.00072 (J)
3/24/2021	<0.0025	0.0022 (J)	<0.0025	0.001 (J)
8/24/2021		0.00054 (J)		
8/25/2021	<0.0025		<0.0025	0.0046
2/22/2022	<0.0025			
2/23/2022		0.0039	<0.0025	0.0014 (J)
8/3/2022	8.5E-05 (J)		0.00041 (J)	
8/4/2022		0.0002 (J)		0.0037
Mean	0.002066	0.002337	0.002292	0.001568
Std. Dev.	0.0009202	0.00193	0.0006563	0.001205
Upper Lim.	0.0025	0.003033	0.0025	0.00137
Lower Lim.	0.0005	0.001189	0.00041	0.0005485

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					<0.002	<0.002
5/6/2016	<0.002		<0.002	<0.002		
6/21/2016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/15/2016					<0.002	<0.002
8/16/2016	<0.002	<0.002	<0.002	<0.002		
9/28/2016	<0.002				<0.002	<0.002
9/29/2016		<0.002	<0.002	<0.002		
11/16/2016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/17/2017				<0.002	<0.002	<0.002
1/18/2017		<0.002	<0.002			
1/19/2017	<0.002					
3/2/2017	0.0036	0.0032	0.0033	0.003	0.0034	0.0031
4/18/2017	<0.002			<0.002	<0.002	<0.002
4/19/2017			<0.002			
4/25/2017		<0.002				
7/13/2017		<0.002				
3/29/2018	<0.002	<0.002			<0.002	
3/30/2018			<0.002	<0.002		<0.002
6/12/2018		<0.002				
6/13/2018	<0.002		<0.002	<0.002	<0.002	<0.002
10/10/2018	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/29/2019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/28/2020		<0.002			0.0015 (J)	
1/29/2020	<0.002		<0.002	<0.002		<0.002
3/10/2020	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
9/16/2020		0.029	<0.002			
9/17/2020	<0.002			<0.002	<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/24/2021			<0.002	<0.002		
8/25/2021	<0.002	<0.002			<0.002	<0.002
2/22/2022	<0.002	<0.002				
2/23/2022			<0.002	<0.002	<0.002	<0.002
8/2/2022		<0.002				
8/3/2022	<0.002			<0.002	<0.002	
8/4/2022			<0.002			<0.002
Mean	0.002084	0.003484	0.002068	0.002053	0.002047	0.002058
Std. Dev.	0.0003671	0.006185	0.0002982	0.0002294	0.000347	0.0002524
Upper Lim.	0.0036	0.0032	0.0033	0.003	0.0034	0.0031
Lower Lim.	0.002	0.002	0.002	0.002	0.0015	0.002

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.0036 (J)	0.00359 (J)
5/6/2016	<0.0025		0.00311 (J)	<0.0025		
6/21/2016	0.0012 (J)	<0.0025	0.0031 (J)	0.0006 (J)	0.0097 (J)	0.0033 (J)
8/15/2016					0.0098	0.0038
8/16/2016	0.00047 (J)	<0.0025	0.0034	0.00064 (J)		
9/28/2016	0.00058 (J)				0.0095	0.0043
9/29/2016		<0.0025	0.0032	0.00054 (J)		
11/16/2016	<0.0025	<0.0025	0.0032	0.00041 (J)	0.0094	0.004
1/17/2017				0.00051 (J)	0.0099	0.0051
1/18/2017		<0.0025	0.0032			
1/19/2017	0.0004 (J)					
3/2/2017	<0.0025	<0.0025	0.0042	0.00064 (J)	0.013	0.0064
4/18/2017	<0.0025			0.00057 (J)	0.0086	0.005
4/19/2017			0.0035			
4/25/2017		<0.0025				
7/13/2017		<0.0025				
3/29/2018	<0.0025	<0.0025			0.0088	
3/30/2018			0.0037	0.00068 (J)		0.015
6/12/2018		<0.0025				
6/13/2018	<0.0025		0.0035	0.00048 (J)	0.0093	0.014
10/10/2018	<0.0025	<0.0025	0.0034	0.00063 (J)	0.012	0.018
1/29/2019	<0.0025	<0.0025	0.00293	<0.0025	0.0103	0.0159
3/26/2019	<0.0025	<0.0025	0.003	<0.0025	0.009	0.02
9/10/2019	0.00032 (J)	0.00016 (J)	0.0027	0.00065	0.011	0.019
1/28/2020		<0.0025			0.008	
1/29/2020	0.00027 (J)		0.003	0.00067		0.025
3/10/2020	<0.0025	<0.0025	0.0024 (J)	0.0005 (J)	0.0081	0.017
9/16/2020		0.0015 (J)	0.002 (J)			
9/17/2020	0.0002 (J)			0.00053 (J)	0.0098	0.024
3/24/2021	<0.0025	<0.0025	0.0019 (J)	0.00053 (J)	0.0063	0.002 (J)
8/24/2021			0.0018 (J)	0.00034 (J)		
8/25/2021	0.00018 (J)	<0.0025			0.0032	0.021
2/22/2022	<0.0025	<0.0025				
2/23/2022			0.0016 (J)	0.0012 (J)	0.007	0.015
8/2/2022		<0.0025				
8/3/2022	<0.0025			0.00051 (J)	0.0044	
8/4/2022			0.0013 (J)			0.0092
Mean	0.00172	0.002341	0.002864	0.0008633	0.008605	0.01193
Std. Dev.	0.001038	0.0005452	0.0007569	0.0007039	0.002527	0.007674
Upper Lim.	0.0025	0.0025	0.003281	0.00068	0.009999	0.01617
Lower Lim.	0.0004	0.0015	0.002446	0.00051	0.007211	0.007699

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.75	1.21
5/6/2016	1.07		0.633	1.41		
6/21/2016	2.01	0.292 (U)	1.19 (U)	1.71	1.01	0.895 (U)
8/15/2016					1.3	1.64
8/16/2016	1.12	0.232 (U)	0.516	1.75		
9/28/2016	1.09				1.06	2.17
9/29/2016		1.11	0.665	1.43		
11/16/2016	1.58	0.798	0.694	1.9	0.855	1.49
1/17/2017				1.9	1.59	1.75
1/18/2017		0.302 (U)	0.688			
1/19/2017	1.64					
3/2/2017	1.08	0.437	0.484	1.37	1.4	1.03
4/18/2017	1.23			1.42	0.684	1.83
4/19/2017			0.599			
4/25/2017		0.391				
7/13/2017		0.47				
3/29/2018	1.21	0.736			0.822	
3/30/2018			0.677	1.43		2.15
6/12/2018		0.438				
6/13/2018	1.09		0.272 (U)	1.27	0.716	1.51
10/10/2018	1.95	0.371	0.336	1.54	1.51	2.72
1/29/2019	1.11	0.639	0.719	1.34	1.7	1.93
3/26/2019	1	0.607	0.41 (U)	1.25	0.784	1.79
9/10/2019	1.26	0.939	0.548	1.6	0.958	1.78
1/28/2020		0.465			1.38	
1/29/2020	1.39		0.0985 (U)	1.44		1.61
3/10/2020	1.4	0.34 (U)	0.589	1.32	0.903	1.95
9/16/2020		1.09	1.11			
9/17/2020	1.79			0.666 (U)	1.28	1.56
12/8/2020	1.87			1.65		
3/24/2021	1.81	0.434 (U)	0.625	1.58	1.2	0.636
8/24/2021			0.313 (U)	1.65		
8/25/2021	2.12	0.563			0.767	2.13
2/22/2022	1.85	0.888				
2/23/2022			0.598	1.47	1.42	2.62
8/2/2022		1.08				
8/3/2022	2.2			2.56	1.11	
8/4/2022			0.632			1.24
Mean	1.494	0.601	0.5903	1.53	1.105	1.697
Std. Dev.	0.3954	0.2817	0.247	0.3456	0.3147	0.5214
Upper Lim.	1.706	0.7565	0.7266	1.715	1.278	1.985
Lower Lim.	1.282	0.4456	0.454	1.344	0.9311	1.41

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.394	0.103 (J)
5/6/2016	0.28 (J)		0.088 (J)	0.086 (J)		
6/21/2016	0.36	0.14 (J)	0.19 (J)	0.23 (J)	0.49	0.1 (J)
8/15/2016					0.44	0.11 (J)
8/16/2016	0.27	0.29	0.087 (J)	<0.2		
9/28/2016	0.26				0.4	0.1 (J)
9/29/2016		0.26	<0.2	0.082 (J)		
11/16/2016	0.24	0.25	<0.2	0.087 (J)	0.36	0.091 (J)
1/17/2017				0.086 (J)	0.2	<0.2
1/18/2017		0.26	<0.2			
1/19/2017	0.22					
3/2/2017	0.27	0.28	0.15 (J)	0.15 (J)	0.36	0.16 (J)
4/18/2017	0.2			<0.2	0.29	<0.2
4/19/2017			<0.2			
4/25/2017		0.25				
7/13/2017		0.21				
10/10/2017	0.18 (J)	0.22	<0.2	<0.2	0.28	<0.2
3/29/2018	0.16 (J)	0.23			0.23	
3/30/2018			<0.2	<0.2		0.088 (J)
6/12/2018		0.23				
6/13/2018	0.14 (J)		<0.2	<0.2	0.2	0.15 (J)
10/10/2018	0.17 (J)	0.25	0.085 (J)	<0.2	0.23	0.11 (J)
3/26/2019	0.16	0.22	0.076 (J)	0.072 (J)	0.19 (J)	0.088 (J)
9/10/2019	0.098 (J)	0.2	0.07 (J)	0.073 (J)	0.15	0.083 (J)
3/10/2020	0.086 (J)	0.15	0.05 (J)	0.058 (J)	0.18	0.084 (J)
9/16/2020		0.26	0.076 (J)			
9/17/2020	0.15			0.083 (J)	0.25	0.11
3/24/2021	0.27	0.27	0.11	0.092 (J)	0.35	0.11
8/24/2021			0.095 (J)	0.11		
8/25/2021	0.097 (J)	0.19			0.15	0.038 (J)
2/22/2022	0.047 (J)	0.093 (J)				
2/23/2022			0.075 (J)	0.086 (J)	0.22	0.05 (J)
8/2/2022		0.074 (J)				
8/3/2022	0.12			0.079 (J)	0.2	
8/4/2022			0.072 (J)			0.087 (J)
Mean	0.1889	0.2164	0.0962	0.0987	0.2782	0.0981
Std. Dev.	0.08087	0.06008	0.02986	0.036	0.1014	0.02701
Upper Lim.	0.2348	0.2505	0.1101	0.1	0.3358	0.1134
Lower Lim.	0.143	0.1822	0.07275	0.082	0.2206	0.08276



# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-7	MGWC-8
5/5/2016		<0.001	<0.001
6/21/2016	0.0001 (J)	0.0003 (J)	<0.001
8/15/2016		<0.001	<0.001
8/16/2016	<0.001		
9/28/2016		<0.001	<0.001
9/29/2016	<0.001		
11/16/2016	<0.001	<0.001	<0.001
1/17/2017		<0.001	<0.001
1/18/2017	<0.001		
3/2/2017	<0.001	<0.001	<0.001
4/18/2017		<0.001	<0.001
4/25/2017	<0.001		
7/13/2017	<0.001		
3/29/2018	<0.001	<0.001	
3/30/2018			<0.001
1/29/2019	<0.001	<0.001	<0.001
1/28/2020	<0.001	<0.001	
1/29/2020			<0.001
3/10/2020	<0.001	<0.001	<0.001
9/16/2020	<0.001		
9/17/2020		<0.001	<0.001
3/24/2021	<0.001	<0.001	<0.001
8/25/2021	<0.001	0.00019 (J)	0.00022 (J)
2/22/2022	<0.001		
2/23/2022		<0.001	<0.001
8/2/2022	<0.001		
8/3/2022		0.00021 (J)	
8/4/2022			<0.001
Mean	0.0009471	0.0008647	0.0009541
Std. Dev.	0.0002183	0.000302	0.0001892
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	0.0003	0.00022

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.0586	0.0252 (J)
5/6/2016	0.0128 (J)		<0.025	0.0113 (J)		
6/21/2016	0.0102 (J)	0.0112 (J)	0.0047 (J)	0.0103 (J)	0.122	0.0228 (J)
8/15/2016					0.12	0.026
8/16/2016	0.012	0.014	0.0043 (J)	0.01		
9/28/2016	0.012				0.12	0.026
9/29/2016		0.017	0.0048 (J)	0.01		
11/16/2016	0.013	0.016	0.0058	0.014	0.13	0.031
1/17/2017				0.014	0.14	0.032
1/18/2017		0.015	0.0051			
1/19/2017	0.011					
3/2/2017	0.013	0.015	0.0061	0.013	0.13	0.031
4/18/2017	0.0097			0.01	0.11	0.023
4/19/2017			0.0042 (J)			
4/25/2017		0.013				
7/13/2017		0.014				
3/29/2018	0.017 (J)	0.032 (J)			0.17 (J)	
3/30/2018			0.008 (J)	0.017 (J)		0.058 (J)
6/12/2018		0.019				
6/13/2018	0.0094		0.0054	0.011	0.12	0.035
10/10/2018	0.011	0.027	0.0055	0.013	0.13	0.046
1/29/2019	0.0109	0.0172	0.00537	0.0106	0.112	0.0361
3/26/2019	0.01	0.02	0.0051	0.012	0.12	0.043
9/10/2019	0.012	0.023	0.0074	0.015	0.11	0.042
1/28/2020		0.022			0.13	
1/29/2020	0.0096		0.0059	0.012		0.037
3/10/2020	<0.025	0.018	0.0068	0.014	0.11	0.028
9/16/2020		0.025	0.0055			
9/17/2020	0.0086			0.012	0.11	0.039
3/24/2021	0.013	0.018	0.0066	0.013	0.13	0.011
8/24/2021			0.0062	0.012		
8/25/2021	0.0096	0.017			0.12	0.037
2/22/2022	0.01	0.022				
2/23/2022			0.0066	0.013	0.13	0.028
8/2/2022		0.026				
8/3/2022	0.01			0.013	0.13	
8/4/2022			0.0063			0.021
Mean	0.0113	0.01911	0.006103	0.01239	0.1216	0.03229
Std. Dev.	0.0019	0.005262	0.001756	0.001818	0.01973	0.01024
Upper Lim.	0.01235	0.02202	0.006755	0.01339	0.13	0.03794
Lower Lim.	0.01025	0.01621	0.005191	0.01139	0.112	0.02664

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0002	<0.0002
5/6/2016		<0.0002	<0.0002		
6/21/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/15/2016				<0.0002	0.00015 (J)
8/16/2016	<0.0002	7.8E-05 (J)	<0.0002		
9/28/2016				<0.0002	<0.0002
9/29/2016	<0.0002	<0.0002	<0.0002		
11/16/2016	8.6E-05 (J)	0.0001 (J)	7E-05 (J)	8E-05 (J)	0.00021
1/17/2017			<0.0002	<0.0002	7.6E-05 (J)
1/18/2017	<0.0002	<0.0002			
3/2/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4/18/2017			<0.0002	<0.0002	0.00018 (J)
4/19/2017		<0.0002			
4/25/2017	<0.0002				
7/13/2017	<0.0002				
3/29/2018	7.4E-05 (J)			<0.0002	
3/30/2018		<0.0002	<0.0002		0.00013 (J)
6/12/2018	<0.0002				
6/13/2018		<0.0002	<0.0002	<0.0002	0.00074
10/10/2018	<0.0002	<0.0002	<0.0002	<0.0002	0.00013 (J)
1/29/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/28/2020	<0.0002			<0.0002	
1/29/2020		<0.0002	<0.0002		0.00012 (J)
3/10/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002	<0.0002			
9/17/2020			<0.0002	<0.0002	0.00014 (J)
3/24/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/24/2021		<0.0002	<0.0002		
8/25/2021	<0.0002			<0.0002	0.0041
10/26/2021					<0.0002
2/22/2022	<0.0002				
2/23/2022		<0.0002	<0.0002	<0.0002	0.00028
8/2/2022	<0.0002				
8/3/2022			<0.0002	<0.0002	
8/4/2022		<0.0002			0.00068
Mean	0.0001874	0.0001883	0.0001932	0.0001937	0.0004268
Std. Dev.	3.789E-05	3.519E-05	2.982E-05	2.753E-05	0.000881
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.00021
Lower Lim.	8.6E-05	0.0001	7E-05	8E-05	0.00014

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-7	MGWC-8
5/5/2016			0.00351 (J)	<0.015
5/6/2016	0.0021 (J)			
6/21/2016	0.002 (J)	0.002 (J)	<0.015	<0.015
8/15/2016			<0.015	<0.015
8/16/2016	0.0019 (J)	0.0012 (J)		
9/28/2016	0.0018 (J)		<0.015	<0.015
9/29/2016		0.0014 (J)		
11/16/2016	<0.015	<0.015	<0.015	<0.015
1/17/2017			<0.015	<0.015
1/18/2017		<0.015		
1/19/2017	0.0011 (J)			
3/2/2017	0.0012 (J)	<0.015	<0.015	<0.015
4/18/2017	0.0013 (J)		<0.015	0.0037 (J)
4/25/2017		<0.015		
7/13/2017		<0.015		
3/29/2018	0.0017 (J)	<0.015	<0.015	
3/30/2018				<0.015
6/12/2018		<0.015		
6/13/2018	0.00087 (J)		<0.015	<0.015
10/10/2018	<0.015	<0.015	<0.015	<0.015
1/29/2019	<0.015	<0.015	<0.015	<0.015
1/28/2020		<0.015	<0.015	
1/29/2020	0.0015 (J)			<0.015
3/10/2020	<0.015	<0.015	<0.015	<0.015
9/16/2020		0.0024 (J)		
9/17/2020	0.0012 (J)		<0.015	<0.015
3/24/2021	0.0029 (J)	<0.015	<0.015	<0.015
8/25/2021	0.00088 (J)	<0.015	<0.015	<0.015
2/22/2022	0.0014 (J)	0.00064 (J)		
2/23/2022			<0.015	<0.015
8/2/2022		0.00093 (J)		
8/3/2022	0.0011 (J)		<0.015	
8/4/2022				<0.015
Mean	0.004366	0.01071	0.0144	0.01441
Std. Dev.	0.005662	0.006491	0.002636	0.002592
Upper Lim.	0.0029	0.015	0.015	0.015
Lower Lim.	0.0011	0.0014	0.00351	0.0037

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					<0.005	<0.005
5/6/2016	<0.005		<0.005	<0.005		
6/21/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/15/2016					<0.005	0.00033 (J)
8/16/2016	<0.005	<0.005	<0.005	<0.005		
9/28/2016	<0.005				<0.005	0.00038 (J)
9/29/2016		<0.005	<0.005	<0.005		
11/16/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/17/2017				<0.005	<0.005	<0.005
1/18/2017		<0.005	<0.005			
1/19/2017	<0.005					
3/2/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/18/2017	<0.005			<0.005	<0.005	0.0024
4/19/2017			<0.005			
4/25/2017		<0.005				
7/13/2017		<0.005				
3/29/2018	0.0005 (J)	0.00027 (J)			0.00026 (J)	
3/30/2018			0.00045 (J)	0.00044 (J)		0.00027 (J)
6/12/2018		<0.005				
6/13/2018	<0.005		<0.005	<0.005	<0.005	<0.005
10/10/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/29/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/28/2020		<0.005			<0.005	
1/29/2020	<0.005		<0.005	<0.005		<0.005
2/22/2022	<0.005	<0.005				
2/23/2022			<0.005	<0.005	<0.005	<0.005
8/2/2022		<0.005				
8/3/2022	<0.005			<0.005	<0.005	
8/4/2022			<0.005			<0.005
Mean	0.0047	0.004685	0.004697	0.004696	0.004684	0.003892
Std. Dev.	0.001162	0.001221	0.001175	0.001177	0.001224	0.001962
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0005	0.00027	0.00045	0.00044	0.00026	0.00038

# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 11/10/2022 3:48 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-8
5/5/2016					<0.001
5/6/2016	<0.001		<0.001	<0.001	
6/21/2016	9E-05 (J)	<0.001	<0.001	<0.001	0.0001 (J)
8/15/2016					0.00016 (J)
8/16/2016	<0.001	<0.001	<0.001	<0.001	
9/28/2016	<0.001				0.00014 (J)
9/29/2016		<0.001	<0.001	<0.001	
11/16/2016	<0.001	<0.001	<0.001	<0.001	9E-05 (J)
1/17/2017				<0.001	0.00016 (J)
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				
3/2/2017	<0.001	<0.001	<0.001	<0.001	0.00018 (J)
4/18/2017	9.5E-05 (J)			<0.001	0.00019 (J)
4/19/2017			<0.001		
4/25/2017		<0.001			
7/13/2017		<0.001			
3/29/2018	0.00014 (J)	<0.001			
3/30/2018			<0.001	<0.001	0.00027 (J)
6/12/2018		<0.001			
6/13/2018	<0.001		<0.001	<0.001	0.00027 (J)
10/10/2018	<0.001	<0.001	<0.001	<0.001	0.00025 (J)
1/29/2019	<0.001	<0.001	<0.001	<0.001	<0.001
1/28/2020		<0.001			
1/29/2020	0.00032 (J)		0.00021 (J)	0.00037 (J)	0.00042 (J)
3/10/2020	<0.001	0.00015 (J)	<0.001	0.00016 (J)	0.00025 (J)
9/16/2020		0.00027 (J)	<0.001		
9/17/2020	0.00016 (J)			<0.001	0.00031 (J)
3/24/2021	<0.001	<0.001	<0.001	<0.001	<0.001
8/24/2021			<0.001	<0.001	
8/25/2021	<0.001	<0.001			0.0004 (J)
2/22/2022	<0.001	<0.001			
2/23/2022			<0.001	<0.001	<0.001
8/2/2022		<0.001			
8/3/2022	<0.001			<0.001	
8/4/2022			<0.001		<0.001
Mean	0.0007792	0.0009168	0.0009584	0.0009226	0.0004311
Std. Dev.	0.0003821	0.0002499	0.0001812	0.0002344	0.0003598
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00016	0.00027	0.00021	0.00037	0.00016

FIGURE I.

# Appendix IV Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 11/10/2022, 3:49 PM

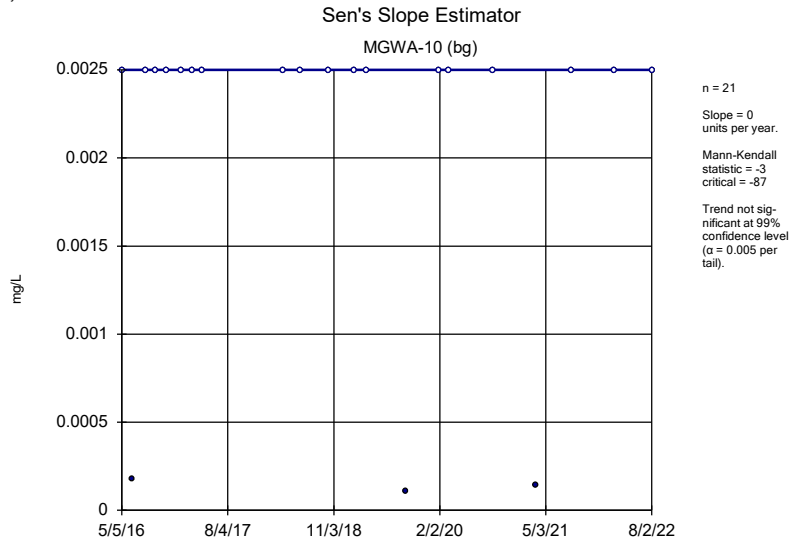
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.003436</b>	<b>109</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>



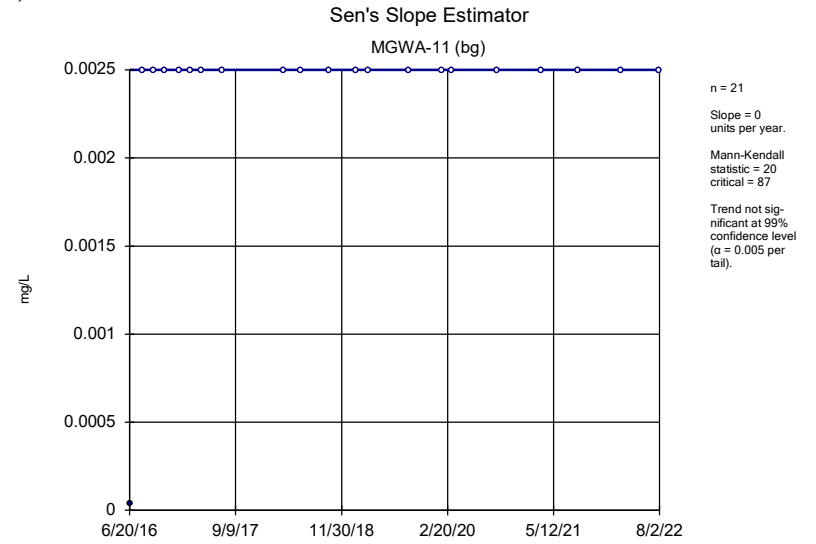
# Appendix IV Trend Tests - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 11/10/2022, 3:49 PM

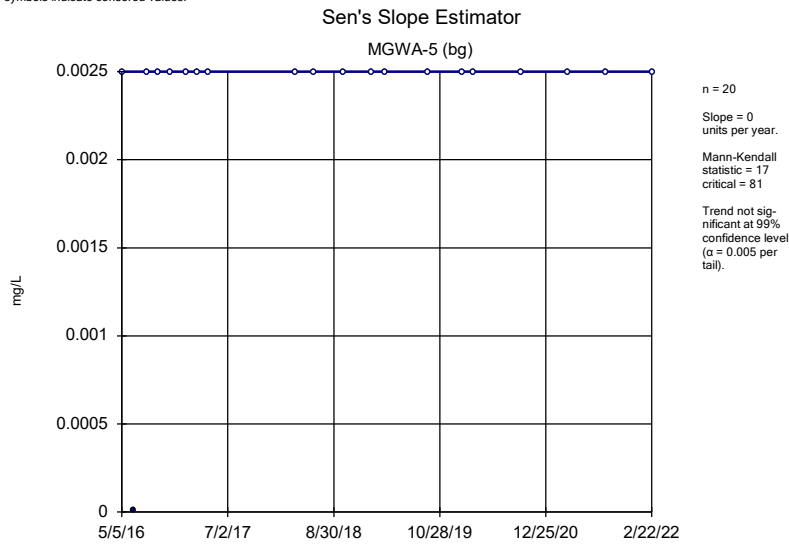
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWA-10 (bg)	0	-3	-87	No	21	85.71	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	20	87	No	21	95.24	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	17	81	No	20	95	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	-13	-87	No	21	42.86	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6A (bg)	0	0	30	No	10	20	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-7	-0.0004758	-63	-87	No	21	0	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.003436</b>	<b>109</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Lithium (mg/L)	MGWA-10 (bg)	0.00004732	8	87	No	21	4.762	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0008924	35	87	No	21	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0003448	44	87	No	21	4.762	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6 (bg)	0	6	87	No	21	95.24	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.0002362	-26	-30	No	10	60	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWC-7	0	9	87	No	21	0	n/a	n/a	0.01	NP



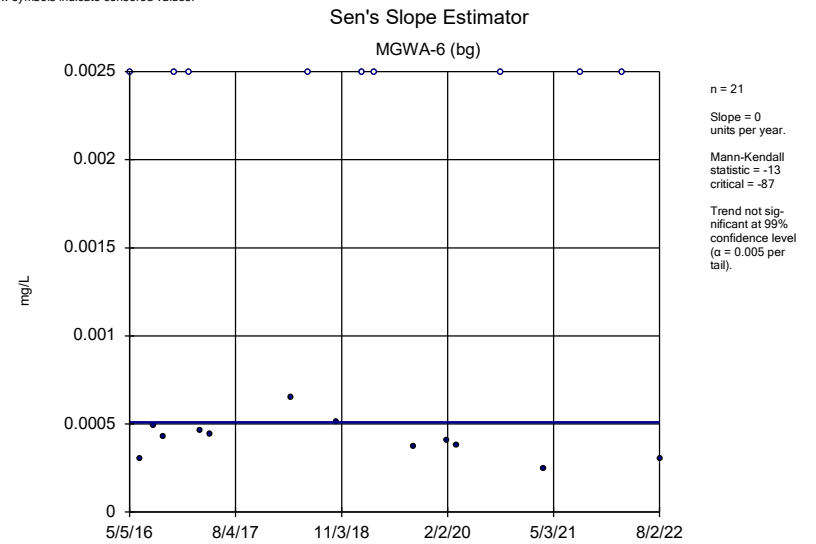
Constituent: Cobalt Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Cobalt Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

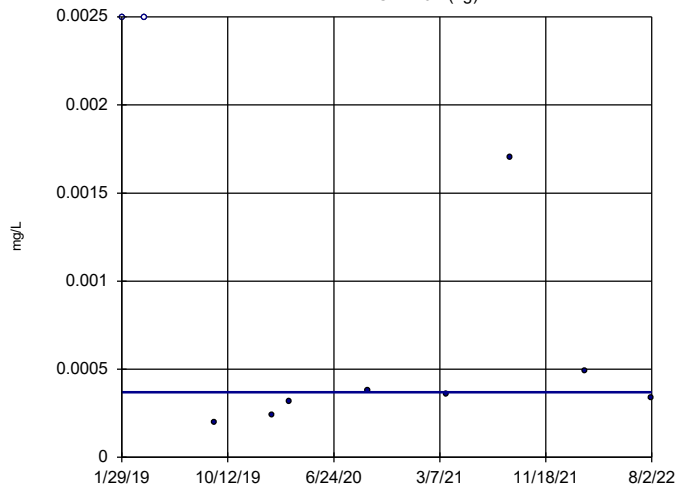


Constituent: Cobalt Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



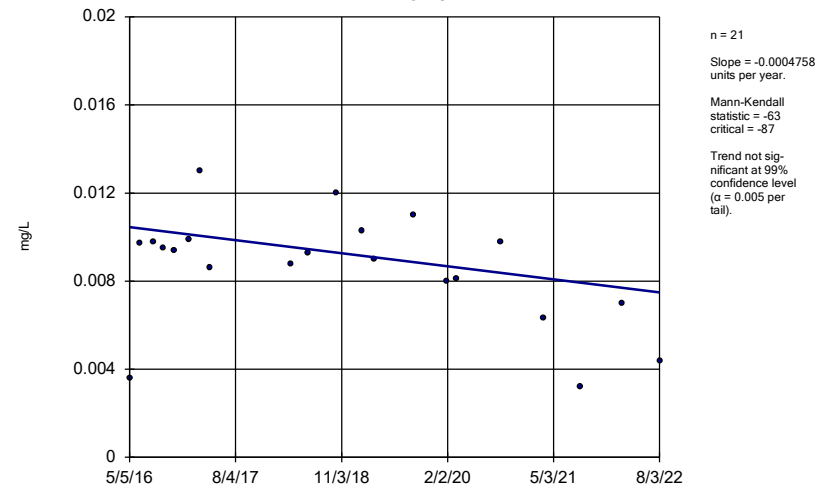
Constituent: Cobalt Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-6A (bg)



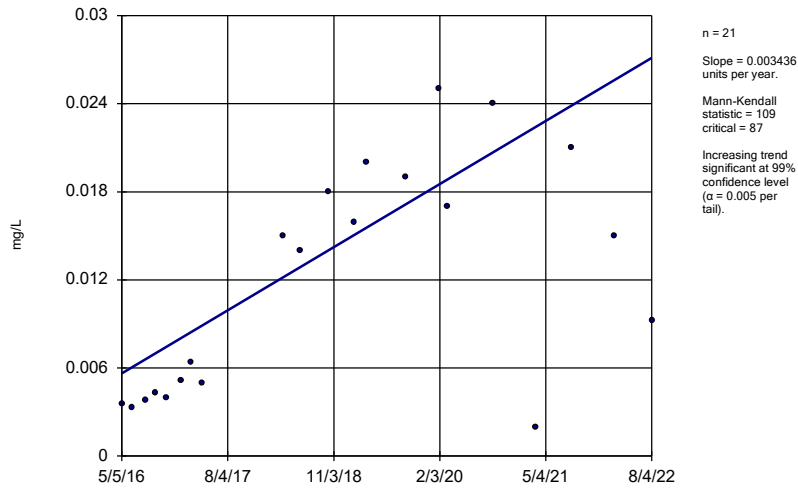
Constituent: Cobalt Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-7



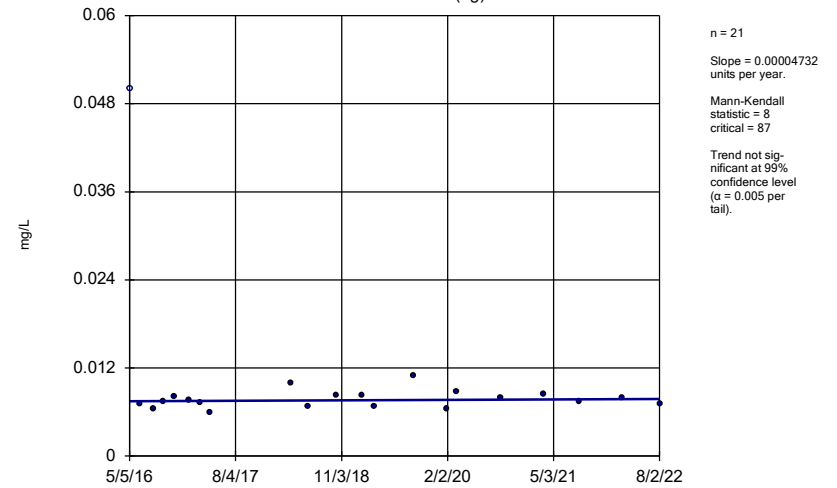
Constituent: Cobalt Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWC-8



Constituent: Cobalt Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator  
MGWA-10 (bg)

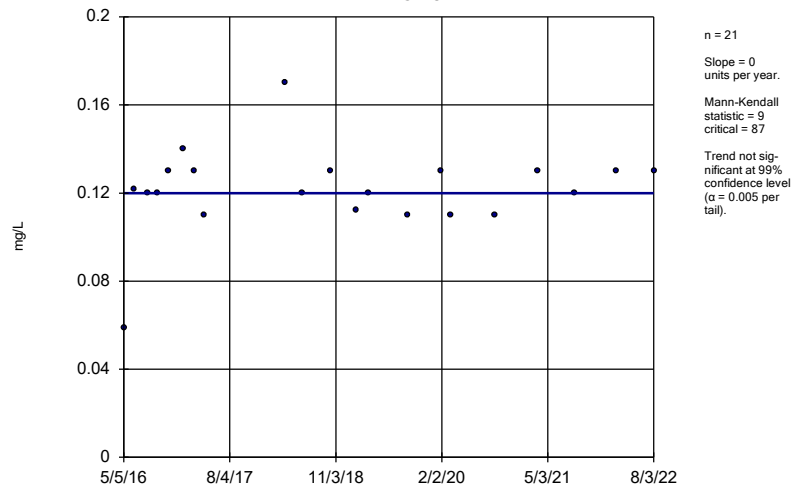


Constituent: Lithium Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

MGWC-7



Constituent: Lithium Analysis Run 11/10/2022 3:49 PM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



**ATLANTIC COAST  
CONSULTING, INC.**

Roswell, GA  
1150 Northmeadow  
Pky, Suite 100  
Roswell, GA 30076  
Phone: 770.594.5998

Savannah, GA  
7 East Congress Street  
Suite 801  
Savannah, GA 31401  
Phone: 912.236.3471

Knoxville, TN  
8848 Cedar Springs  
Lane, Suite 202  
Knoxville, TN 37923  
Phone: 865.531.9143