



**Plant McIntosh Ash Pond 1**

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

**2023 SEMIANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT**



**ATLANTIC COAST  
CONSULTING, INC.**

## PROFESSIONAL CERTIFICATION

This *2023 Semiannual 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), specifically § 257.90(e), 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 391-3-4-.01.

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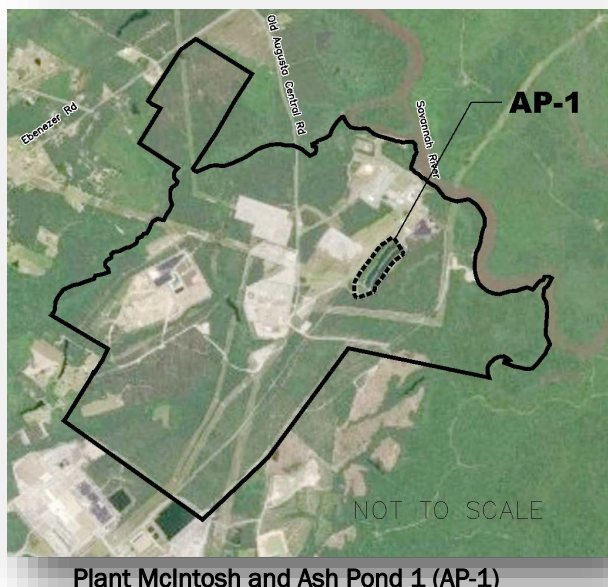
## SUMMARY

This summary of the *2023 Semiannual Groundwater Monitoring and Corrective Action Report* provides the groundwater monitoring and corrective action program status from January through June 2023 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 June 2023 semiannual 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.

During the reporting period, ACC conducted a semiannual sampling event in February 2023. Groundwater samples were submitted to Eurofins Environment Testing America (Eurofins) for analysis. Per the CCR Rule, groundwater results for February 2023 data were evaluated in accordance with the certified statistical methods. Those evaluations showed statistically



<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

significant levels of Appendix III<sup>2</sup> and Appendix IV<sup>3</sup> parameters in wells as summarized in the table below.

<b>Appendix III Parameter</b>	<b>February 2023</b>
Boron	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Chloride	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Fluoride	MGWC-12
Sulfate	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
TDS	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
<b>Appendix IV Parameter</b>	<b>February 2023</b>
Cobalt	MGWC-7, MGWC-8
Lithium	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 June 2023, 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.

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<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

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## 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 *2023 Semiannual 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 June 2023 in accordance with 40 CFR § 257.90(e). This report includes results of the semiannual assessment monitoring event conducted in February 2023.

### 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 former CCR Unit included 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 – February 2023. 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, Assessment Well and 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 June 2023 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 2023.

### **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 reporting year (2022). 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 the semiannual sampling event are included in Appendix A, Laboratory Analytical and Field Sampling Reports. Any issues identified in well inspection checklists are 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 (Official Code of Georgia Annotated § 12-5-134(5)(d)(vii)). In February 2023, monitoring wells were inspected, and no necessary corrective actions were identified 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 2023 as the first semiannual assessment monitoring event of 2023. 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 Sampling**

Additional geochemical anion and cation data was collected for evaluation purposes only.

## **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 map provided in Figure 4, Potentiometric Contour Map – February 2023. The general direction of groundwater flow across AP-1 is predominately toward the east. The groundwater flow patterns observed during the 2023 monitoring event 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 Table 4, Horizontal Groundwater Flow Velocity Calculations – February 2023. The calculated flow velocity was 0.039 feet per day during the February 2023 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 parameter 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 Savannah, GA 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 one groundwater monitoring event in the semiannual 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 Table 5A, Summary of Groundwater Analytical Data – February 2023. Additional geochemical analytical data collected during the February 2023 monitoring event are summarized in Table 5B, Summary of Groundwater Anion and Cation Data – February 2023.

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 detection 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 Table 5A 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.

## 4.0 STATISTICAL ANALYSIS

Groundwater monitoring data collected during the February 2023 semiannual assessment monitoring event 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 Analysis Reports. 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 2023 semiannual assessment event. 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) 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 2023 event 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 tables 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 2023 sampling event:

- 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 event conducted in February 2023. 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 June 2023, 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 2023 *Semiannual 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 SSLs 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 August 2023.

## 8.0 REFERENCES

- Georgia Power Company, 2019. *Supplemental Information for the Ash Pond 1 Alternate Source Demonstration*, November 21, 2019.
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- US EPA, 2020. *Field Equipment Cleaning and Decontamination – Operating Procedure: LSASDPROC-205-R4*, Athens, Georgia, 16 p.
- US EPA, 2023. *Groundwater Sampling – Operating Procedure: LSASDPROC-301-R6*, Athens, Georgia, 36 p.

## TABLES

**Table 1A  
Groundwater Monitoring Network Well 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-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  
Assessment Well and 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. 7-8, 2023
<b>Purpose of Sampling Event</b>		<b>Semiannual Assessment</b>
MGWC-1	Downgradient	X
MGWC-2	Downgradient	X
MGWC-3	Downgradient	X
MGWA-5	Upgradient	X
MGWA-6	Upgradient	X
MGWA-6A	Upgradient	X
MGWC-7	Downgradient	X
MGWC-8	Downgradient	X
MGWA-10	Upgradient	X
MGWA-11	Upgradient	X
MGWC-12	Downgradient	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. 6, 2023 Groundwater Elevation (NAVD88)
MGWC-1	65.26	24.99
MGWC-2	48.54	26.72
MGWC-3	52.65	31.39
MGWC-4	64.33	35.41
MGWA-5	64.36	38.89
MGWA-6	61.08	36.36
MGWA-6A	59.76	36.42
MGWC-7	54.40	29.57
MGWC-8	62.61	27.71
MGWA-9	59.29	35.43
MGWA-10	65.07	46.56
MGWA-11	64.91	42.03
MGWC-12	64.10	35.54
PZ-13	40.91	23.28
PZ-14	47.11	27.97
PZ-15	42.37	23.27
PZ-16	54.71	20.84
PZ-17	57.51	24.17
PZ-18	53.48	32.39
MGWC-19	53.98	28.96
MGWC-20	51.56	26.78
MGWC-21	62.65	27.52
MGWC-22	47.53	27.50
MGWC-23	57.47	22.44
MGWA-24	60.53	37.77

Notes:

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

**Table 4**  
**Horizontal Groundwater Flow Velocity Calculations**  
**February 2023**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Equation

$$v = \frac{K ( dh/dl )}{P_e} \quad \text{where: } v = \text{groundwater velocity}$$

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 0.962 ft/day	See note 1.
dh/dl <sub>1</sub> = 23.29/2796 ft/ft 0.0083 unitless	Hydraulic gradient from MGWA-10 to PZ-15
dh/dl <sub>2</sub> = 15.52/1898 ft/ft 0.0082 unitless	MGWA-6 to PZ-16
dh/dl <sub>3</sub> = 11.26/1458 ft/ft 0.0077 unitless	MGWA-9 to PZ-17
dh/dl <sub>avg</sub> = 0.0081 unitless	Average of dh/dl <sub>1,2,3</sub>
P <sub>e</sub> = 0.20 unitless	See note 2.

Calculated Flow Velocity

$$v = \frac{(0.962)(0.0081)}{0.20}$$

$$v = 0.039 \text{ ft/day, or } 14 \text{ ft/year}$$

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 2023**  
**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
		2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/8/2023	2/8/2023	2/7/2023
APPENDIX III	<b>Boron</b>	0.022 J	0.028 J	0.039 J	<0.022	0.028 J	1.5	1.8	0.63
	<b>Calcium</b>	26	110	99	3.6	34	110	100	110
	<b>Chloride</b>	4.7	3.1	3.2	7.0	4.2	12	11	11
	<b>Fluoride</b>	0.069 J	0.060 J	0.064 J	<0.040	0.070 J	0.11	0.074 J	0.076 J
	<b>pH</b>	7.85	7.13	7.24	5.46	7.72	7.28	7.44	7.01
	<b>Sulfate</b>	2.5	2.3	1.6	<0.40	3.3	140	150	120
	<b>TDS</b>	150	290	260	61	190	400	440	410
APPENDIX IV	<b>Antimony</b>	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034
	<b>Arsenic</b>	<0.00086	0.011	0.013	<0.00086	0.0025	0.0016	<0.00086	0.0018
	<b>Barium</b>	0.028	0.030	0.032	0.021	0.10	0.10	0.044	0.16
	<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	0.00012 J	0.0021 J	<0.000078
	<b>Chromium</b>	<0.0012	<0.0012	<0.0012	0.0053	<0.0012	0.0014 J	<0.0012	<0.0012
	<b>Cobalt</b>	<0.00022	0.00023 J	0.00069 J	<0.00022	<0.00022	<0.00022	0.0012 J	0.0025
	<b>Fluoride</b>	0.069 J	0.060 J	0.064 J	<0.040	0.070 J	0.11	0.074 J	0.076 J
	<b>Lead</b>	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
	<b>Lithium</b>	0.011	<0.0020	<0.0020	0.0081	0.022	0.010	0.0065	0.014
	<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	<0.00086	<0.00086	0.00098 J	0.0012 J	<0.00086	<0.00086
	<b>Radium (226 + 228)</b>	0.0887 U	0.487 U	0.701	0.671	0.858	1.77	0.799	2.14
	<b>Selenium</b>	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099
<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 5A**  
**Summary of Groundwater Analytical Data**  
**February 2023**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Substance		Well ID		
		MGWC-7	MGWC-8	MGWC-12
		2/8/2023	2/8/2023	2/7/2023
APPENDIX III	Boron	2.1	3.9	0.067 J
	Calcium	65	110	30
	Chloride	11	13	4.2
	Fluoride	0.14	0.084 J	0.25
	pH	7.43	6.76	6.95
	Sulfate	220	280	4.7
	TDS	370	480	190
APPENDIX IV	Antimony	0.00051 J	<0.00034	<0.00034
	Arsenic	<0.00086	0.0010	0.00098 J
	Barium	0.020	0.052	0.060
	Beryllium	<0.00020	0.00020 J	<0.00020
	Cadmium	<0.000078	0.0018 J	<0.000078
	Chromium	0.0013 J	0.0013 J	0.0012 J
	Cobalt	0.0044	0.0019 J	<0.00022
	Fluoride	0.14	0.084 J	0.25
	Lead	<0.00021	<0.00021	<0.00021
	Lithium	0.14	0.012	0.024
	Mercury	<0.000080	0.00026	<0.000080
	Molybdenum	<0.00086	<0.00086	<0.00086
	Radium (226 + 228)	1.88	1.11	0.849
	Selenium	<0.00099	<0.00099	<0.00099
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 5B**  
**Summary of Groundwater Anion and Cation Data**  
**February 2023**  
**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
		2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/8/2023	2/8/2023	2/7/2023
Anions	Alkalinity	110	280	260	16	140	190	220	210
	Bicarbonate Alkalinity	110	280	260	16	140	190	220	210
	Carbonate Alkalinity	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Chloride	4.7	3.1	3.2	7.0	4.2	12	11	11
	Sulfate	2.5	2.3	1.6	<0.40	3.3	140	150	120
Cations	Calcium	26	110	99	3.6	34	110	100	110
	Magnesium	11	2.6	2.6	1.1	10	5.8	17	5.5
	Potassium	1.1	0.68	0.61	1.1	1.9	2.0	2.0	1.6
	Sodium	6.8	4.5	4.3	6.3	9.5	20	31	16
<b>Total Dissolved Solids</b>		150	290	260	61	190	400	440	410

Notes:

1. Results for substances are reported in milligrams per liter (mg/L).
2. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).

**Table 5B**  
**Summary of Groundwater Anion and Cation Data**  
**February 2023**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

Substance		Well ID		
		MGWC-7	MGWC-8	MGWC-12
		2/8/2023	2/8/2023	2/7/2023
Anions	Alkalinity	49	95	140
	Bicarbonate Alkalinity	49	95	140
	Carbonate Alkalinity	<5.0	<5.0	<5.0
	Chloride	11	13	4.2
	Sulfate	220	280	4.7
Cations	Calcium	65	110	30
	Magnesium	6.8	19	12
	Potassium	3.3	2.8	1.9
	Sodium	43	26	13
<b>Total Dissolved Solids</b>		370	480	190

Notes:

1. Results for substances are reported in milligrams per liter (mg/L).
2. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).

**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



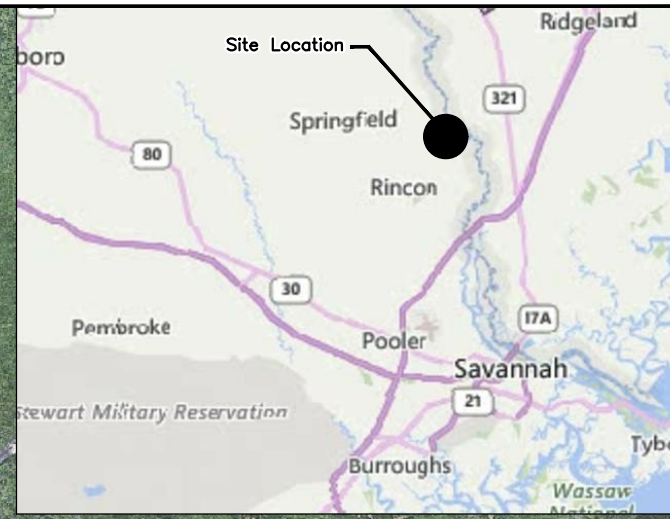
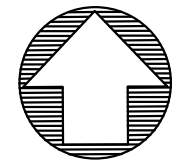

**Table 7**  
**Summary of Background Levels and Groundwater Protection Standards**  
**Plant McIntosh Ash Pond 1**  
**Effingham County, Georgia**

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)	1.13	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 JANUARY 2023 FROM SAM, LLC.  
 ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT

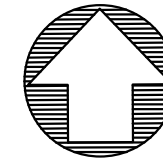
 Georgia Power

GEORGIA POWER COMPANY  
 PLANT McINTOSH ASH POND 1

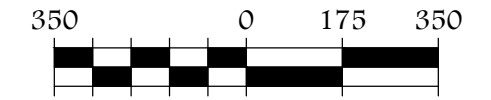
2023 SEMIANNUAL GROUNDWATER MONITORING  
 AND CORRECTIVE ACTION REPORT

**SITE LOCATION MAP**

PROJECT NO. I054-117		August 2023
<u>DRAWN BY:</u>	MM	<u>FIGURE:</u>  <b>1</b>
<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 JANUARY 2023 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT



GEORGIA POWER COMPANY  
PLANT McINTOSH ASH POND 1

2023 SEMIANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT

**CCR REMOVAL MAP  
FEBRUARY 2023**

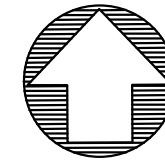
PROJECT NO. I054-117

August 2023

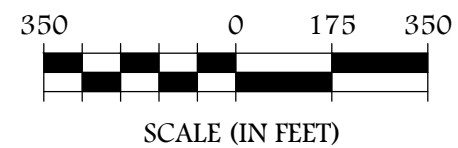
DRAWN BY: MM

FIGURE:

CHECKED BY: CA



*ACC*



**LEGEND:**

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

NOTES:  
1. AERIAL DATED JANUARY 2023 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT



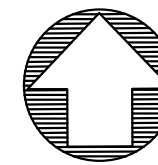
GEORGIA POWER COMPANY  
PLANT McINTOSH ASH POND 1

2023 SEMIANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT

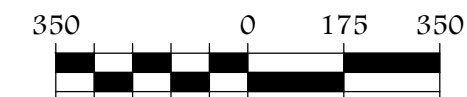
**WELL LOCATION MAP**

PROJECT NO. IO54-117 August 2023

<u>DRAWN BY:</u>	MM	<u>FIGURE:</u>	3
<u>CHECKED BY:</u>	CA		



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:

- AERIAL DATED JANUARY 2023 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.
- \* ELEVATIONS FOR MGWC-19, MGWC-21, AND MGWC-22 NOT USED TO CALCULATE POTENTIOMETRIC CONTOURS.

#### PROJECT



GEORGIA POWER COMPANY  
PLANT McINTOSH ASH POND 1

2023 SEMIANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT

### POTENTIOMETRIC CONTOUR MAP FEBRUARY 2023

PROJECT NO. I054-117

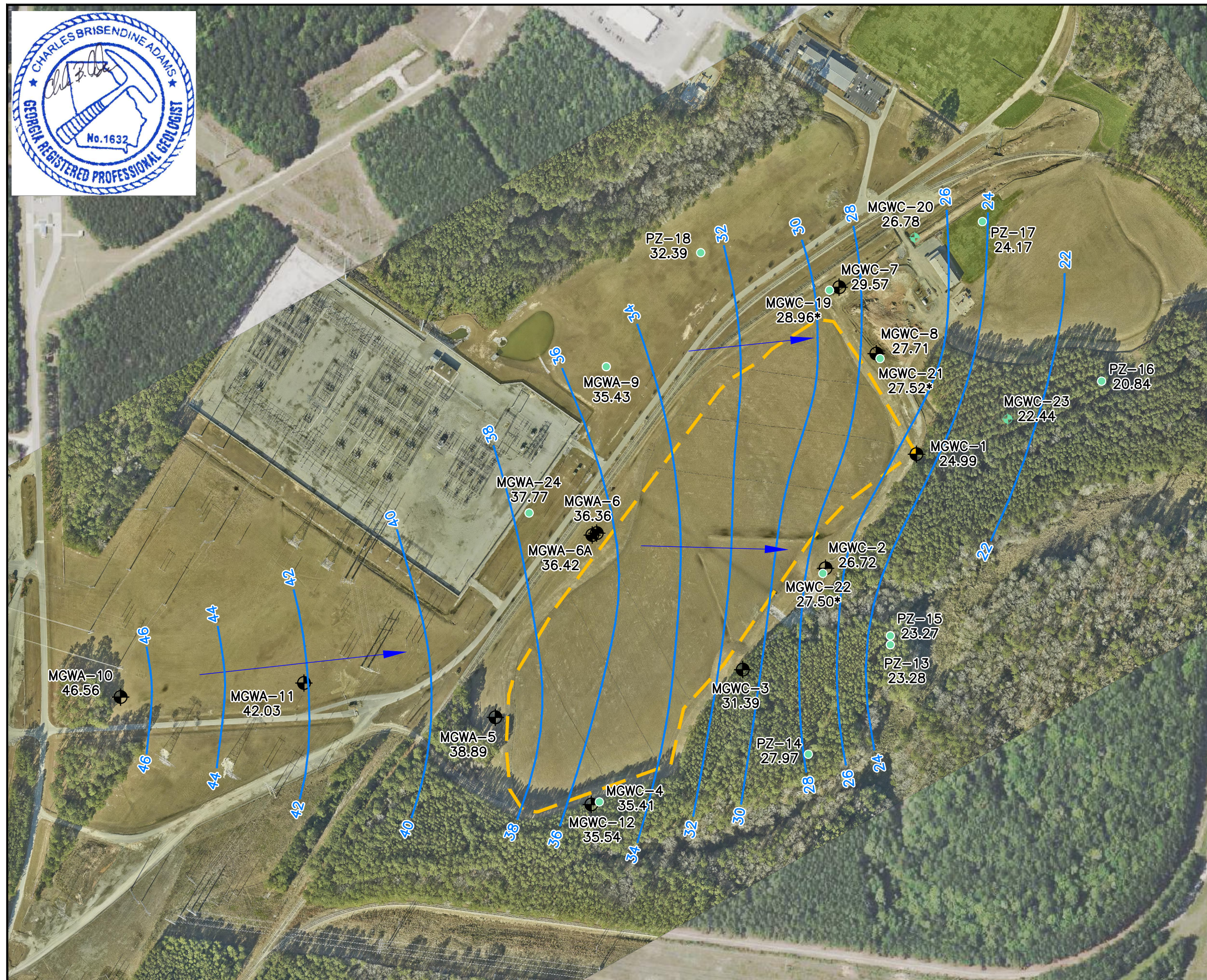
August 2023

DRAWN BY: RW

FIGURE:

CHECKED BY: MM

4



## APPENDICES

## APPENDIX A

### Laboratory Analytical and Field Sampling Reports



## APPENDIX A

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*Laboratory Analytical and Field Sampling Reports  
February 2023 Monitoring Event*

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Lauren Hartley  
Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Generated 2/20/2023 9:38:45 AM

**JOB DESCRIPTION**

Plant McIntosh Ash Pond 1

**JOB NUMBER**

680-230304-1

# Eurofins Savannah

## Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

## Authorization



Authorized for release by  
David Fuller, Project Manager  
[David.Fuller@et.eurofinsus.com](mailto:David.Fuller@et.eurofinsus.com)  
(770)344-8986

Generated  
2/20/2023 9:38:45 AM

# Definitions/Glossary

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

Job ID: 680-230304-1

## 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.
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.
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: 680-230304-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-230304-1	MCI-MGWA-10	Water	02/07/23 10:15	02/09/23 10:01
680-230304-2	MCI-MGWA-11	Water	02/07/23 12:10	02/09/23 10:01
680-230304-3	MCI-MGWA-5	Water	02/07/23 13:40	02/09/23 10:01
680-230304-4	MCI-MGWA-6	Water	02/07/23 12:05	02/09/23 10:01
680-230304-5	MCI-MGWA-6A	Water	02/07/23 10:40	02/09/23 10:01
680-230304-6	MCI-MGWC-3	Water	02/07/23 14:20	02/09/23 10:01
680-230304-7	MCI-MGWC-12	Water	02/07/23 15:05	02/09/23 10:01
680-230304-8	MCI-MGWC-1	Water	02/08/23 10:00	02/09/23 10:01
680-230304-9	MCI-MGWC-2	Water	02/08/23 09:55	02/09/23 10:01
680-230304-10	MCI-MGWC-7	Water	02/08/23 11:50	02/09/23 10:01
680-230304-11	MCI-MGWC-8	Water	02/08/23 13:30	02/09/23 10:01
680-230304-12	MCI-AP1-FD-01	Water	02/08/23 00:00	02/09/23 10:01
680-230304-13	MCI-AP1-FD-02	Water	02/08/23 00:00	02/09/23 10:01
680-230304-14	MCI-AP1-FB-01	Water	02/07/23 14:55	02/09/23 10:01
680-230304-15	MCI-AP1-FB-02	Water	02/08/23 10:25	02/09/23 10:01
680-230304-16	MCI-AP1-EB-03	Water	02/07/23 15:40	02/09/23 10:01
680-230304-17	MCI-AP1-EB-04	Water	02/08/23 11:45	02/09/23 10:01

# Case Narrative

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

Job ID: 680-230304-1

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**Job ID: 680-230304-1**

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**Laboratory: Eurofins Savannah**

## Narrative

**Job Narrative  
680-230304-1**

## Receipt

The samples were received on 2/9/2023 10:01 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 2.1°C, 2.6°C, 3.1°C and 3.7°C

## HPLC/IC

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

## Metals

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

## General Chemistry

Method 2540C: A lesser volume of sample was used for the following samples due to the nature of the sample matrix resulting in elevated reporting limits: MCI-MGWA-6, MCI-MGWA-6A, MCI-MGWC-3, MCI-MGWC-1, MCI-MGWC-2, MCI-MGWC-7, MCI-MGWVC-8, MCI-AP-1-FD-01 and MCI-AP-1-FD-02.

# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWA-10**

**Lab Sample ID: 680-230304-1**

Date Collected: 02/07/23 10:15

Matrix: Water

Date Received: 02/09/23 10:01

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.0		1.0	0.20	mg/L			02/11/23 21:09	1
Fluoride	<0.040		0.10	0.040	mg/L			02/11/23 21:09	1
Sulfate	<0.40		1.0	0.40	mg/L			02/11/23 21:09	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 14:59	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 14:59	1
Barium	0.021		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 14:59	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 14:59	1
Boron	<0.022		0.080	0.022	mg/L		02/10/23 05:10	02/10/23 14:59	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 14:59	1
Calcium	3.6		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 14:59	1
Chromium	0.0053		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 14:59	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 14:59	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 14:59	1
Lithium	0.0081		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 14:59	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 14:59	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 14:59	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 14:59	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		02/10/23 08:21	02/10/23 16:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	61		10	10	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.46				SU			02/07/23 10:15	1

**Client Sample ID: MCI-MGWA-11**

**Lab Sample ID: 680-230304-2**

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.2		1.0	0.20	mg/L			02/11/23 21:22	1
Fluoride	0.070	J	0.10	0.040	mg/L			02/11/23 21:22	1
Sulfate	3.3		1.0	0.40	mg/L			02/11/23 21:22	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:03	1
Arsenic	0.0025		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:03	1
Barium	0.10		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:03	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:03	1
Boron	0.028	J	0.080	0.022	mg/L		02/10/23 05:10	02/10/23 15:03	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWA-11**

**Lab Sample ID: 680-230304-2**

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

**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		02/10/23 05:10	02/10/23 15:03	1
<b>Calcium</b>	<b>34</b>		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:03	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:03	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:03	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:03	1
<b>Lithium</b>	<b>0.022</b>		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:03	1
<b>Molybdenum</b>	<b>0.00098 J</b>		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:03	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:03	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:03	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		02/10/23 08:21	02/10/23 16:48	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>190</b>		10	10	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.72</b>				SU			02/07/23 12:10	1

**Client Sample ID: MCI-MGWA-5**

**Lab Sample ID: 680-230304-3**

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

**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>4.7</b>		1.0	0.20	mg/L			02/11/23 21:35	1
<b>Fluoride</b>	<b>0.069 J</b>		0.10	0.040	mg/L			02/11/23 21:35	1
<b>Sulfate</b>	<b>2.5</b>		1.0	0.40	mg/L			02/11/23 21:35	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:07	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:07	1
<b>Barium</b>	<b>0.028</b>		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:07	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:07	1
<b>Boron</b>	<b>0.022 J</b>		0.080	0.022	mg/L		02/10/23 05:10	02/10/23 15:07	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:07	1
<b>Calcium</b>	<b>26</b>		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:07	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:07	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:07	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:07	1
<b>Lithium</b>	<b>0.011</b>		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:07	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:07	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:07	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:07	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWA-5**

**Lab Sample ID: 680-230304-3**

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

**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		02/10/23 08:21	02/10/23 16:56	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	150		10	10	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.85				SU			02/07/23 13:40	1

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.20	mg/L			02/11/23 21:48	1
Fluoride	0.060	J	0.10	0.040	mg/L			02/11/23 21:48	1
Sulfate	2.3		1.0	0.40	mg/L			02/11/23 21:48	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:11	1
Arsenic	0.011		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:11	1
Barium	0.030		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:11	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:11	1
Boron	0.028	J	0.080	0.022	mg/L		02/10/23 05:10	02/10/23 15:11	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:11	1
Calcium	110		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:11	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:11	1
Cobalt	0.00023	J	0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:11	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:11	1
Lithium	<0.0020		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:11	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:11	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:11	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:11	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		02/10/23 08:21	02/10/23 16:58	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	290		40	40	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.13				SU			02/07/23 12:05	1

# Client Sample Results

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

Job ID: 680-230304-1

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

**Lab Sample ID: 680-230304-5**

Date Collected: 02/07/23 10:40

Matrix: Water

Date Received: 02/09/23 10:01

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.2		1.0	0.20	mg/L			02/11/23 22:01	1
Fluoride	0.064	J	0.10	0.040	mg/L			02/11/23 22:01	1
Sulfate	1.6		1.0	0.40	mg/L			02/11/23 22:01	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:23	1
Arsenic	0.013		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:23	1
Barium	0.032		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:23	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:23	1
Boron	0.039	J	0.080	0.022	mg/L		02/10/23 05:10	02/13/23 13:15	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:23	1
Calcium	99		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:23	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:23	1
Cobalt	0.00069	J	0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:23	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:23	1
Lithium	<0.0020		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:23	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:23	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:23	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:23	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		02/10/23 08:21	02/10/23 17:01	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	260		40	40	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.24				SU			02/07/23 10:40	1

**Client Sample ID: MCI-MGWC-3**

**Lab Sample ID: 680-230304-6**

Date Collected: 02/07/23 14:20

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/11/23 22:15	1
Fluoride	0.076	J	0.10	0.040	mg/L			02/11/23 22:15	1
Sulfate	120		1.0	0.40	mg/L			02/11/23 22:15	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:27	1
Arsenic	0.0018		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:27	1
Barium	0.16		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:27	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:27	1
Boron	0.63		0.080	0.022	mg/L		02/10/23 05:10	02/13/23 13:19	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-3**

**Lab Sample ID: 680-230304-6**

Date Collected: 02/07/23 14:20

Matrix: Water

Date Received: 02/09/23 10:01

**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		02/10/23 05:10	02/10/23 15:27	1
<b>Calcium</b>	<b>110</b>		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:27	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:27	1
<b>Cobalt</b>	<b>0.0025</b>		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:27	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:27	1
<b>Lithium</b>	<b>0.014</b>		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:27	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:27	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:27	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:27	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		02/10/23 08:21	02/10/23 17:03	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C-2011)</b>	<b>410</b>		40	40	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.01</b>				SU			02/07/23 14:20	1

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

**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>4.2</b>		1.0	0.20	mg/L			02/11/23 22:28	1
<b>Fluoride</b>	<b>0.25</b>		0.10	0.040	mg/L			02/11/23 22:28	1
<b>Sulfate</b>	<b>4.7</b>		1.0	0.40	mg/L			02/11/23 22:28	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:31	1
<b>Arsenic</b>	<b>0.00098</b>	<b>J</b>	0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:31	1
<b>Barium</b>	<b>0.060</b>		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:31	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:31	1
<b>Boron</b>	<b>0.067</b>	<b>J</b>	0.080	0.022	mg/L		02/10/23 05:10	02/13/23 13:23	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:31	1
<b>Calcium</b>	<b>30</b>		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:31	1
<b>Chromium</b>	<b>0.0012</b>	<b>J</b>	0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:31	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:31	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:31	1
<b>Lithium</b>	<b>0.024</b>		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:31	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:31	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:31	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:31	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

**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		02/10/23 08:21	02/10/23 17:06	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	190		10	10	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.95				SU			02/07/23 15:05	1

**Client Sample ID: MCI-MGWC-1**

**Lab Sample ID: 680-230304-8**

Date Collected: 02/08/23 10:00

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 00:00	1
Fluoride	0.11		0.10	0.040	mg/L			02/12/23 00:00	1
Sulfate	140		1.0	0.40	mg/L			02/12/23 00:00	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:35	1
Arsenic	0.0016		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:35	1
Barium	0.10		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:35	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:35	1
Boron	1.5		0.32	0.088	mg/L		02/10/23 05:10	02/13/23 13:27	4
Cadmium	0.00012	J	0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:35	1
Calcium	110		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:35	1
Chromium	0.0014	J	0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:35	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:35	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:35	1
Lithium	0.010		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:35	1
Molybdenum	0.0012	J	0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:35	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:35	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:35	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		02/10/23 08:21	02/10/23 17:08	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			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.28				SU			02/08/23 10:00	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-2**

**Lab Sample ID: 680-230304-9**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 00:40	1
Fluoride	0.074	J	0.10	0.040	mg/L			02/12/23 00:40	1
Sulfate	150		1.0	0.40	mg/L			02/12/23 00:40	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:39	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:39	1
Barium	0.044		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:39	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:39	1
Boron	1.8		0.32	0.088	mg/L		02/10/23 05:10	02/13/23 13:30	4
Cadmium	0.0021	J	0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:39	1
Calcium	100		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:39	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:39	1
Cobalt	0.0012	J	0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:39	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:39	1
Lithium	0.0065		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:39	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:39	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:39	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:39	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		02/10/23 08:21	02/10/23 17:11	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	440		40	40	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.44				SU			02/08/23 09:55	1

**Client Sample ID: MCI-MGWC-7**

**Lab Sample ID: 680-230304-10**

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 00:53	1
Fluoride	0.14		0.10	0.040	mg/L			02/12/23 00:53	1
Sulfate	220		1.0	0.40	mg/L			02/12/23 00:53	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00051	J	0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:43	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:43	1
Barium	0.020		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:43	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:43	1
Boron	2.1		0.32	0.088	mg/L		02/10/23 05:10	02/13/23 13:34	4

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-7**

**Lab Sample ID: 680-230304-10**

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

**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		02/10/23 05:10	02/10/23 15:43	1
Calcium	65		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:43	1
Chromium	0.0013	J	0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:43	1
Cobalt	0.0044		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:43	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:43	1
Lithium	0.14		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:43	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:43	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:43	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:43	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		02/10/23 08:21	02/10/23 17:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	370		40	40	mg/L			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.43				SU			02/08/23 11:50	1

**Client Sample ID: MCI-MGWC-8**

**Lab Sample ID: 680-230304-11**

Date Collected: 02/08/23 13:30

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 01:06	1
Fluoride	0.084	J	0.10	0.040	mg/L			02/12/23 01:06	1

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	280		5.0	2.0	mg/L			02/15/23 22:11	5

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:47	1
Arsenic	0.0010		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:47	1
Barium	0.052		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:47	1
Beryllium	0.00020	J	0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:47	1
Boron	3.9		0.80	0.22	mg/L		02/10/23 05:10	02/13/23 13:38	10
Cadmium	0.0018	J	0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:47	1
Calcium	110		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:47	1
Chromium	0.0013	J	0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:47	1
Cobalt	0.0019	J	0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:47	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:47	1
Lithium	0.012		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:47	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:47	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:47	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-8**

**Lab Sample ID: 680-230304-11**

Date Collected: 02/08/23 13:30

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:47	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00026		0.00020	0.000080	mg/L		02/10/23 08:21	02/10/23 17:16	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			02/10/23 13:46	1

**Method: EPA Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.76				SU			02/08/23 13:30	1

**Client Sample ID: MCI-AP1-FD-01**

**Lab Sample ID: 680-230304-12**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 01:19	1
Fluoride	0.072	J	0.10	0.040	mg/L			02/12/23 01:19	1
Sulfate	150		1.0	0.40	mg/L			02/12/23 01:19	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:51	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:51	1
Barium	0.041		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:51	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:51	1
Boron	1.8		0.32	0.088	mg/L		02/10/23 05:10	02/13/23 13:42	4
Cadmium	0.0010	J	0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:51	1
Calcium	99		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:51	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:51	1
Cobalt	0.0011	J	0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:51	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:51	1
Lithium	0.0051		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:51	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:51	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:51	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:51	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		02/10/23 13:31	02/14/23 11:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	440		40	40	mg/L			02/10/23 13:46	1

# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-AP1-FD-02**

**Lab Sample ID: 680-230304-13**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 01:32	1
Fluoride	0.084	J	0.10	0.040	mg/L			02/12/23 01:32	1

**Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	280		5.0	2.0	mg/L			02/15/23 22:24	5

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:55	1
Arsenic	0.00089	J	0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:55	1
Barium	0.052		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:55	1
Beryllium	0.00025	J	0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:55	1
Boron	3.9		0.80	0.22	mg/L		02/10/23 05:10	02/13/23 13:46	10
Cadmium	0.0014	J	0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:55	1
Calcium	100		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:55	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:55	1
Cobalt	0.0021	J	0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:55	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:55	1
Lithium	0.013		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:55	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:55	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:55	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:55	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00018	J	0.00020	0.000080	mg/L		02/10/23 13:31	02/14/23 11:07	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	490		40	40	mg/L			02/10/23 13:46	1

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/11/23 22:41	1
Fluoride	<0.040		0.10	0.040	mg/L			02/11/23 22:41	1
Sulfate	<0.40		1.0	0.40	mg/L			02/11/23 22:41	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 15:59	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:59	1
Barium	<0.00089		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 15:59	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 15:59	1
Boron	0.044	J	0.080	0.022	mg/L		02/10/23 05:10	02/13/23 13:50	1
Cadmium	<0.00078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 15:59	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.14		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:59	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 15:59	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 15:59	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 15:59	1
Lithium	<0.0020		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:59	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 15:59	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 15:59	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 15:59	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		02/10/23 13:31	02/14/23 11:10	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			02/10/23 13:46	1

**Client Sample ID: MCI-AP1-FB-02**

**Lab Sample ID: 680-230304-15**

Date Collected: 02/08/23 10:25

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 01:46	1
Fluoride	<0.040		0.10	0.040	mg/L			02/12/23 01:46	1
Sulfate	<0.40		1.0	0.40	mg/L			02/12/23 01:46	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 16:12	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 16:12	1
Barium	<0.00089		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 16:12	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 16:12	1
Boron	<0.022		0.080	0.022	mg/L		02/10/23 05:10	02/13/23 14:02	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 16:12	1
Calcium	<0.14		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 16:12	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 16:12	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 16:12	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 16:12	1
Lithium	<0.0020		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 16:12	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 16:12	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 16:12	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 16:12	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		02/10/23 13:31	02/14/23 11:12	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-AP1-FB-02**

**Lab Sample ID: 680-230304-15**

Date Collected: 02/08/23 10:25

Matrix: Water

Date Received: 02/09/23 10:01

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			02/10/23 13:00	1

**Client Sample ID: MCI-AP1-EB-03**

**Lab Sample ID: 680-230304-16**

Date Collected: 02/07/23 15:40

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/11/23 22:54	1
Fluoride	<0.040		0.10	0.040	mg/L			02/11/23 22:54	1
Sulfate	<0.40		1.0	0.40	mg/L			02/11/23 22:54	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 16:16	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 16:16	1
Barium	<0.00089		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 16:16	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 16:16	1
Boron	<0.022		0.080	0.022	mg/L		02/10/23 05:10	02/13/23 14:06	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 16:16	1
Calcium	<0.14		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 16:16	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 16:16	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 16:16	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 16:16	1
Lithium	<0.0020		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 16:16	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 16:16	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 16:16	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 16:16	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		02/10/23 13:31	02/14/23 11:15	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			02/14/23 13:00	1

**Client Sample ID: MCI-AP1-EB-04**

**Lab Sample ID: 680-230304-17**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 10:01

**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			02/12/23 01:59	1
Fluoride	<0.040		0.10	0.040	mg/L			02/12/23 01:59	1
Sulfate	<0.40		1.0	0.40	mg/L			02/12/23 01:59	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:56	02/10/23 22:30	1

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# Client Sample Results

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

Job ID: 680-230304-1

**Client Sample ID: MCI-AP1-EB-04**

**Lab Sample ID: 680-230304-17**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:56	02/10/23 22:30	1
Barium	<0.00089		0.010	0.00089	mg/L		02/10/23 05:56	02/10/23 22:30	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:56	02/10/23 22:30	1
Boron	<0.022		0.080	0.022	mg/L		02/10/23 05:56	02/10/23 22:30	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:56	02/10/23 22:30	1
Calcium	<0.14		0.50	0.14	mg/L		02/10/23 05:56	02/10/23 22:30	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:56	02/10/23 22:30	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:56	02/10/23 22:30	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:56	02/10/23 22:30	1
Lithium	<0.0020		0.0050	0.0020	mg/L		02/10/23 05:56	02/10/23 22:30	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:56	02/10/23 22:30	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:56	02/10/23 22:30	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:56	02/10/23 22:30	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		02/10/23 13:31	02/14/23 11:17	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			02/15/23 11:50	1

# QC Sample Results

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

Job ID: 680-230304-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 680-762939/33

Matrix: Water

Analysis Batch: 762939

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			02/11/23 16:46	1
Fluoride	<0.040		0.10	0.040	mg/L			02/11/23 16:46	1
Sulfate	<0.40		1.0	0.40	mg/L			02/11/23 16:46	1

Lab Sample ID: LCS 680-762939/34

Matrix: Water

Analysis Batch: 762939

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	10.3		mg/L		103	90 - 110
Fluoride	2.00	2.14		mg/L		107	90 - 110
Sulfate	10.0	9.83		mg/L		98	90 - 110

Lab Sample ID: LCSD 680-762939/35

Matrix: Water

Analysis Batch: 762939

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	2.15		mg/L		107	90 - 110	1	15
Sulfate	10.0	9.96		mg/L		100	90 - 110	1	15

Lab Sample ID: 680-230302-D-25 MS

Matrix: Water

Analysis Batch: 762939

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	4.9		10.0	14.5		mg/L		96	80 - 120
Fluoride	<0.040		2.00	2.06		mg/L		103	80 - 120
Sulfate	1.7		10.0	11.3		mg/L		96	80 - 120

Lab Sample ID: 680-230302-D-25 MSD

Matrix: Water

Analysis Batch: 762939

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	4.9		10.0	14.6		mg/L		98	80 - 120	1	15
Fluoride	<0.040		2.00	2.10		mg/L		105	80 - 120	2	15
Sulfate	1.7		10.0	11.5		mg/L		98	80 - 120	2	15

Lab Sample ID: MB 680-762940/63

Matrix: Water

Analysis Batch: 762940

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			02/11/23 23:20	1
Fluoride	<0.040		0.10	0.040	mg/L			02/11/23 23:20	1
Sulfate	<0.40		1.0	0.40	mg/L			02/11/23 23:20	1

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# QC Sample Results

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

Job ID: 680-230304-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 680-762940/64**  
**Matrix: Water**  
**Analysis Batch: 762940**

**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	10.3		mg/L		103	90 - 110	
Fluoride	2.00	2.11		mg/L		105	90 - 110	
Sulfate	10.0	9.52		mg/L		95	90 - 110	

**Lab Sample ID: LCSD 680-762940/65**  
**Matrix: Water**  
**Analysis Batch: 762940**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD	Limit
Chloride	10.0	10.3		mg/L		103	90 - 110	0	15	
Fluoride	2.00	2.10		mg/L		105	90 - 110	0	15	
Sulfate	10.0	9.47		mg/L		95	90 - 110	0	15	

**Lab Sample ID: 680-230304-8 MS**  
**Matrix: Water**  
**Analysis Batch: 762940**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	12		10.0	22.3		mg/L		101	80 - 120	
Fluoride	0.11		2.00	2.30		mg/L		109	80 - 120	
Sulfate	140		10.0	149	4	mg/L		84	80 - 120	

**Lab Sample ID: 680-230304-8 MSD**  
**Matrix: Water**  
**Analysis Batch: 762940**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD	Limit
Chloride	12		10.0	22.1		mg/L		99	80 - 120	1	15	
Fluoride	0.11		2.00	2.25		mg/L		107	80 - 120	2	15	
Sulfate	140		10.0	149	4	mg/L		85	80 - 120	0	15	

**Lab Sample ID: MB 680-763601/11**  
**Matrix: Water**  
**Analysis Batch: 763601**

**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			02/15/23	16:45	1
Fluoride	<0.040		0.10	0.040	mg/L			02/15/23	16:45	1
Sulfate	<0.40		1.0	0.40	mg/L			02/15/23	16:45	1

**Lab Sample ID: LCS 680-763601/12**  
**Matrix: Water**  
**Analysis Batch: 763601**

**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	2.12		mg/L		106	90 - 110	
Sulfate	10.0	10.2		mg/L		102	90 - 110	

# QC Sample Results

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

Job ID: 680-230304-1

## Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 680-763601/13  
Matrix: Water  
Analysis Batch: 763601

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	1	15
Fluoride	2.00	2.08		mg/L		104	90 - 110	2	15
Sulfate	10.0	10.0		mg/L		100	90 - 110	1	15

Lab Sample ID: 680-230370-R-2 MS  
Matrix: Water  
Analysis Batch: 763601

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	6.6		10.0	16.5		mg/L		99	80 - 120
Fluoride	0.057	J	2.00	2.06		mg/L		100	80 - 120
Sulfate	4.5		10.0	14.3		mg/L		99	80 - 120

Lab Sample ID: 680-230370-R-2 MSD  
Matrix: Water  
Analysis Batch: 763601

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	6.6		10.0	16.3		mg/L		98	80 - 120	1	15
Fluoride	0.057	J	2.00	2.04		mg/L		99	80 - 120	1	15
Sulfate	4.5		10.0	14.2		mg/L		97	80 - 120	1	15

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

Lab Sample ID: MB 680-762796/1-A  
Matrix: Water  
Analysis Batch: 762951

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 762796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:10	02/10/23 14:34	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 14:34	1
Barium	<0.00089		0.010	0.00089	mg/L		02/10/23 05:10	02/10/23 14:34	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:10	02/10/23 14:34	1
Boron	<0.022		0.080	0.022	mg/L		02/10/23 05:10	02/10/23 14:34	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:10	02/10/23 14:34	1
Calcium	<0.14		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 14:34	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:10	02/10/23 14:34	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:10	02/10/23 14:34	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:10	02/10/23 14:34	1
Lithium	<0.0020		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 14:34	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:10	02/10/23 14:34	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:10	02/10/23 14:34	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:10	02/10/23 14:34	1

Lab Sample ID: LCS 680-762796/2-A  
Matrix: Water  
Analysis Batch: 762951

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 762796

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0500	0.0509		mg/L		102	80 - 120

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# QC Sample Results

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

Job ID: 680-230304-1

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

**Lab Sample ID: LCS 680-762796/2-A**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762796**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Arsenic	0.100	0.104		mg/L		104	80 - 120	
Barium	0.100	0.0989		mg/L		99	80 - 120	
Beryllium	0.0500	0.0511		mg/L		102	80 - 120	
Boron	0.200	0.213		mg/L		106	80 - 120	
Cadmium	0.0500	0.0516		mg/L		103	80 - 120	
Calcium	5.00	5.06		mg/L		101	80 - 120	
Chromium	0.100	0.109		mg/L		109	80 - 120	
Cobalt	0.0500	0.0532		mg/L		106	80 - 120	
Lead	0.505	0.517		mg/L		102	80 - 120	
Lithium	0.500	0.504		mg/L		101	80 - 120	
Molybdenum	0.100	0.107		mg/L		107	80 - 120	
Selenium	0.100	0.105		mg/L		105	80 - 120	
Thallium	0.0500	0.0490		mg/L		98	80 - 120	

**Lab Sample ID: 752-2580-A-5-E MS**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762796**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec	
									Limits	
Antimony	<0.00034		0.0500	0.0522		mg/L		104	75 - 125	
Arsenic	<0.00086		0.100	0.106		mg/L		106	75 - 125	
Barium	0.021		0.100	0.121		mg/L		100	75 - 125	
Beryllium	<0.00020		0.0500	0.0508		mg/L		102	75 - 125	
Boron	<0.022		0.200	0.217		mg/L		109	75 - 125	
Cadmium	<0.000078		0.0500	0.0514		mg/L		103	75 - 125	
Calcium	0.52		5.00	5.67		mg/L		103	75 - 125	
Chromium	0.0041		0.100	0.114		mg/L		110	75 - 125	
Cobalt	0.00079	J	0.0500	0.0553		mg/L		109	75 - 125	
Lead	<0.00021		0.505	0.525		mg/L		104	75 - 125	
Lithium	<0.0020		0.500	0.492		mg/L		98	75 - 125	
Molybdenum	<0.00086		0.100	0.109		mg/L		109	75 - 125	
Selenium	<0.00099		0.100	0.107		mg/L		107	75 - 125	
Thallium	<0.00026		0.0500	0.0491		mg/L		98	75 - 125	

**Lab Sample ID: 752-2580-A-5-F MSD**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762796**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	
									Limits		RPD	Limit
Antimony	<0.00034		0.0500	0.0492		mg/L		98	75 - 125	6	20	
Arsenic	<0.00086		0.100	0.103		mg/L		103	75 - 125	3	20	
Barium	0.021		0.100	0.119		mg/L		98	75 - 125	2	20	
Beryllium	<0.00020		0.0500	0.0503		mg/L		101	75 - 125	1	20	
Boron	<0.022		0.200	0.214		mg/L		107	75 - 125	1	20	
Cadmium	<0.000078		0.0500	0.0493		mg/L		99	75 - 125	4	20	
Calcium	0.52		5.00	5.52		mg/L		100	75 - 125	3	20	
Chromium	0.0041		0.100	0.111		mg/L		107	75 - 125	2	20	
Cobalt	0.00079	J	0.0500	0.0530		mg/L		104	75 - 125	4	20	
Lead	<0.00021		0.505	0.514		mg/L		102	75 - 125	2	20	

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# QC Sample Results

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

Job ID: 680-230304-1

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

Lab Sample ID: 752-2580-A-5-F MSD

Matrix: Water

Analysis Batch: 762951

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 762796

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Lithium	<0.0020		0.500	0.490		mg/L		98	75 - 125	0	20
Molybdenum	<0.00086		0.100	0.108		mg/L		108	75 - 125	2	20
Selenium	<0.00099		0.100	0.105		mg/L		105	75 - 125	3	20
Thallium	<0.00026		0.0500	0.0486		mg/L		97	75 - 125	1	20

Lab Sample ID: MB 680-762798/1-A

Matrix: Water

Analysis Batch: 762951

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 762798

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00034		0.0020	0.00034	mg/L		02/10/23 05:56	02/11/23 11:15	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		02/10/23 05:56	02/11/23 11:15	1
Barium	<0.00089		0.010	0.00089	mg/L		02/10/23 05:56	02/11/23 11:15	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		02/10/23 05:56	02/11/23 11:15	1
Boron	<0.022		0.080	0.022	mg/L		02/10/23 05:56	02/11/23 11:15	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		02/10/23 05:56	02/11/23 11:15	1
Calcium	<0.14		0.50	0.14	mg/L		02/10/23 05:56	02/11/23 11:15	1
Chromium	<0.0012		0.0020	0.0012	mg/L		02/10/23 05:56	02/11/23 11:15	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		02/10/23 05:56	02/11/23 11:15	1
Lead	<0.00021		0.0010	0.00021	mg/L		02/10/23 05:56	02/11/23 11:15	1
Lithium	0.00290	J	0.0050	0.0020	mg/L		02/10/23 05:56	02/11/23 11:15	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		02/10/23 05:56	02/11/23 11:15	1
Selenium	<0.00099		0.0050	0.00099	mg/L		02/10/23 05:56	02/11/23 11:15	1
Thallium	<0.00026		0.0010	0.00026	mg/L		02/10/23 05:56	02/11/23 11:15	1

Lab Sample ID: LCS 680-762798/2-A

Matrix: Water

Analysis Batch: 762951

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 762798

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Antimony	0.0500	0.0504		mg/L		101	80 - 120
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	0.100	0.0955		mg/L		95	80 - 120
Beryllium	0.0500	0.0472		mg/L		94	80 - 120
Boron	0.200	0.194		mg/L		97	80 - 120
Cadmium	0.0500	0.0500		mg/L		100	80 - 120
Calcium	5.00	4.93		mg/L		99	80 - 120
Chromium	0.100	0.103		mg/L		103	80 - 120
Cobalt	0.0500	0.0500		mg/L		100	80 - 120
Lead	0.505	0.489		mg/L		97	80 - 120
Lithium	0.500	0.463		mg/L		93	80 - 120
Molybdenum	0.100	0.104		mg/L		104	80 - 120
Selenium	0.100	0.0998		mg/L		100	80 - 120
Thallium	0.0500	0.0470		mg/L		94	80 - 120



# QC Sample Results

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

Job ID: 680-230304-1

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

**Lab Sample ID: 680-230302-C-21-B MS**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762798**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Antimony	<0.00034		0.0500	0.0478		mg/L		96	75 - 125	
Arsenic	<0.00086		0.100	0.0974		mg/L		97	75 - 125	
Barium	0.012		0.100	0.108		mg/L		95	75 - 125	
Beryllium	<0.00020		0.0500	0.0472		mg/L		94	75 - 125	
Boron	<0.022		0.200	0.209		mg/L		104	75 - 125	
Cadmium	<0.000078		0.0500	0.0480		mg/L		96	75 - 125	
Calcium	0.66		5.00	5.37		mg/L		94	75 - 125	
Chromium	0.0019	J	0.100	0.104		mg/L		102	75 - 125	
Cobalt	0.00026	J	0.0500	0.0499		mg/L		99	75 - 125	
Lead	<0.00021		0.505	0.487		mg/L		97	75 - 125	
Lithium	<0.0020		0.500	0.470		mg/L		94	75 - 125	
Molybdenum	<0.00086		0.100	0.101		mg/L		101	75 - 125	
Selenium	<0.00099		0.100	0.102		mg/L		102	75 - 125	
Thallium	<0.00026		0.0500	0.0462		mg/L		92	75 - 125	

**Lab Sample ID: 680-230302-C-21-C MSD**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762798**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	RPD	Limit
Antimony	<0.00034		0.0500	0.0507		mg/L		101	75 - 125	6	20	
Arsenic	<0.00086		0.100	0.100		mg/L		100	75 - 125	3	20	
Barium	0.012		0.100	0.108		mg/L		96	75 - 125	1	20	
Beryllium	<0.00020		0.0500	0.0490		mg/L		98	75 - 125	4	20	
Boron	<0.022		0.200	0.215		mg/L		108	75 - 125	3	20	
Cadmium	<0.000078		0.0500	0.0505		mg/L		101	75 - 125	5	20	
Calcium	0.66		5.00	5.55		mg/L		98	75 - 125	3	20	
Chromium	0.0019	J	0.100	0.104		mg/L		102	75 - 125	0	20	
Cobalt	0.00026	J	0.0500	0.0509		mg/L		101	75 - 125	2	20	
Lead	<0.00021		0.505	0.501		mg/L		99	75 - 125	3	20	
Lithium	<0.0020		0.500	0.482		mg/L		96	75 - 125	3	20	
Molybdenum	<0.00086		0.100	0.104		mg/L		104	75 - 125	3	20	
Selenium	<0.00099		0.100	0.104		mg/L		104	75 - 125	2	20	
Thallium	<0.00026		0.0500	0.0475		mg/L		95	75 - 125	3	20	

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 680-762809/1-A**  
**Matrix: Water**  
**Analysis Batch: 763201**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 762809**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
	Result	Qualifier								
Mercury	<0.000080		0.00020	0.000080	mg/L		02/10/23 08:17	02/10/23 16:08		1

# QC Sample Results

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

Job ID: 680-230304-1

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

**Lab Sample ID: LCS 680-762809/2-A**  
**Matrix: Water**  
**Analysis Batch: 763201**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 762809**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.00237		mg/L		95	80 - 120

**Lab Sample ID: 680-230306-A-6-E MS**  
**Matrix: Water**  
**Analysis Batch: 763201**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 762809**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000080		0.00100	0.000909		mg/L		91	80 - 120

**Lab Sample ID: 680-230306-A-6-F MSD**  
**Matrix: Water**  
**Analysis Batch: 763201**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 762809**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000080		0.00100	0.000912		mg/L		91	80 - 120	0	20

**Lab Sample ID: MB 680-762884/1-A**  
**Matrix: Water**  
**Analysis Batch: 763358**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 762884**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		02/10/23 13:31	02/14/23 10:47	1

**Lab Sample ID: LCS 680-762884/2-A**  
**Matrix: Water**  
**Analysis Batch: 763358**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 762884**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.00246		mg/L		98	80 - 120

**Lab Sample ID: 680-230283-H-2-C MS**  
**Matrix: Water**  
**Analysis Batch: 763358**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 762884**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000080		0.00100	0.000958		mg/L		96	80 - 120

**Lab Sample ID: 680-230283-H-2-D MSD**  
**Matrix: Water**  
**Analysis Batch: 763358**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 762884**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000080		0.00100	0.000978		mg/L		98	80 - 120	2	20

# QC Sample Results

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

Job ID: 680-230304-1

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C)

**Lab Sample ID: MB 680-762877/1**  
**Matrix: Water**  
**Analysis Batch: 762877**

**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			02/10/23 13:00	1

**Lab Sample ID: LCS 680-762877/2**  
**Matrix: Water**  
**Analysis Batch: 762877**

**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	2340	2380		mg/L		102	80 - 120

**Lab Sample ID: LCSD 680-762877/3**  
**Matrix: Water**  
**Analysis Batch: 762877**

**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	2340	2390		mg/L		102	80 - 120	1	25

**Lab Sample ID: 680-230302-A-16 DU**  
**Matrix: Water**  
**Analysis Batch: 762877**

**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	90		86.0		mg/L		5	5

**Lab Sample ID: MB 680-762903/1**  
**Matrix: Water**  
**Analysis Batch: 762903**

**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			02/10/23 13:46	1

**Lab Sample ID: LCS 680-762903/2**  
**Matrix: Water**  
**Analysis Batch: 762903**

**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	2340	2410		mg/L		103	80 - 120

**Lab Sample ID: LCSD 680-762903/3**  
**Matrix: Water**  
**Analysis Batch: 762903**

**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	2340	2370		mg/L		101	80 - 120	2	25

**Lab Sample ID: 680-230304-10 DU**  
**Matrix: Water**  
**Analysis Batch: 762903**

**Client Sample ID: MCI-MGWC-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	370		388		mg/L		4	5

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# QC Sample Results

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

Job ID: 680-230304-1

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C)

**Lab Sample ID: 680-230304-12 DU**  
**Matrix: Water**  
**Analysis Batch: 762903**

**Client Sample ID: MCI-AP1-FD-01**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	440		432		mg/L		1	5

**Lab Sample ID: MB 680-763352/1**  
**Matrix: Water**  
**Analysis Batch: 763352**

**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			02/14/23 13:00	1

**Lab Sample ID: LCS 680-763352/2**  
**Matrix: Water**  
**Analysis Batch: 763352**

**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	2340	2420		mg/L		103	80 - 120

**Lab Sample ID: LCSD 680-763352/3**  
**Matrix: Water**  
**Analysis Batch: 763352**

**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	2340	2400		mg/L		103	80 - 120	1	25

**Lab Sample ID: 160-48887-D-1 DU**  
**Matrix: Water**  
**Analysis Batch: 763352**

**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	500		494		mg/L		0.4	5

**Lab Sample ID: MB 680-763533/1**  
**Matrix: Water**  
**Analysis Batch: 763533**

**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			02/15/23 11:50	1

**Lab Sample ID: LCS 680-763533/2**  
**Matrix: Water**  
**Analysis Batch: 763533**

**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	2340	2430		mg/L		104	80 - 120

**Lab Sample ID: LCSD 680-763533/3**  
**Matrix: Water**  
**Analysis Batch: 763533**

**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	2340	2370		mg/L		101	80 - 120	2	25

Eurofins Savannah

# QC Sample Results

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

Job ID: 680-230304-1

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: 680-230367-D-1 DU  
Matrix: Water  
Analysis Batch: 763533

Client Sample ID: Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	170		166		mg/L		5	5

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

# QC Association Summary

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

Job ID: 680-230304-1

## HPLC/IC

### Analysis Batch: 762939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	300.0-1993 R2.1	
680-230304-2	MCI-MGWA-11	Total/NA	Water	300.0-1993 R2.1	
680-230304-3	MCI-MGWA-5	Total/NA	Water	300.0-1993 R2.1	
680-230304-4	MCI-MGWA-6	Total/NA	Water	300.0-1993 R2.1	
680-230304-5	MCI-MGWA-6A	Total/NA	Water	300.0-1993 R2.1	
680-230304-6	MCI-MGWC-3	Total/NA	Water	300.0-1993 R2.1	
680-230304-7	MCI-MGWC-12	Total/NA	Water	300.0-1993 R2.1	
680-230304-14	MCI-AP1-FB-01	Total/NA	Water	300.0-1993 R2.1	
680-230304-16	MCI-AP1-EB-03	Total/NA	Water	300.0-1993 R2.1	
MB 680-762939/33	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-762939/34	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-762939/35	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-230302-D-25 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-230302-D-25 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 762940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-8	MCI-MGWC-1	Total/NA	Water	300.0-1993 R2.1	
680-230304-9	MCI-MGWC-2	Total/NA	Water	300.0-1993 R2.1	
680-230304-10	MCI-MGWC-7	Total/NA	Water	300.0-1993 R2.1	
680-230304-11	MCI-MGWC-8	Total/NA	Water	300.0-1993 R2.1	
680-230304-12	MCI-AP1-FD-01	Total/NA	Water	300.0-1993 R2.1	
680-230304-13	MCI-AP1-FD-02	Total/NA	Water	300.0-1993 R2.1	
680-230304-15	MCI-AP1-FB-02	Total/NA	Water	300.0-1993 R2.1	
680-230304-17	MCI-AP1-EB-04	Total/NA	Water	300.0-1993 R2.1	
MB 680-762940/63	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-762940/64	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-762940/65	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-230304-8 MS	MCI-MGWC-1	Total/NA	Water	300.0-1993 R2.1	
680-230304-8 MSD	MCI-MGWC-1	Total/NA	Water	300.0-1993 R2.1	

### Analysis Batch: 763601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-11 - DL	MCI-MGWC-8	Total/NA	Water	300.0-1993 R2.1	
680-230304-13 - DL	MCI-AP1-FD-02	Total/NA	Water	300.0-1993 R2.1	
MB 680-763601/11	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-763601/12	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-763601/13	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-230370-R-2 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-230370-R-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

## Metals

### Prep Batch: 762796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total Recoverable	Water	3005A	
680-230304-2	MCI-MGWA-11	Total Recoverable	Water	3005A	
680-230304-3	MCI-MGWA-5	Total Recoverable	Water	3005A	
680-230304-4	MCI-MGWA-6	Total Recoverable	Water	3005A	
680-230304-5	MCI-MGWA-6A	Total Recoverable	Water	3005A	
680-230304-6	MCI-MGWC-3	Total Recoverable	Water	3005A	

# QC Association Summary

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

Job ID: 680-230304-1

## Metals (Continued)

### Prep Batch: 762796 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-7	MCI-MGWC-12	Total Recoverable	Water	3005A	
680-230304-8	MCI-MGWC-1	Total Recoverable	Water	3005A	
680-230304-9	MCI-MGWC-2	Total Recoverable	Water	3005A	
680-230304-10	MCI-MGWC-7	Total Recoverable	Water	3005A	
680-230304-11	MCI-MGWC-8	Total Recoverable	Water	3005A	
680-230304-12	MCI-AP1-FD-01	Total Recoverable	Water	3005A	
680-230304-13	MCI-AP1-FD-02	Total Recoverable	Water	3005A	
680-230304-14	MCI-AP1-FB-01	Total Recoverable	Water	3005A	
680-230304-15	MCI-AP1-FB-02	Total Recoverable	Water	3005A	
680-230304-16	MCI-AP1-EB-03	Total Recoverable	Water	3005A	
MB 680-762796/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-762796/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
752-2580-A-5-E MS	Matrix Spike	Total Recoverable	Water	3005A	
752-2580-A-5-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Prep Batch: 762798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-17	MCI-AP1-EB-04	Total Recoverable	Water	3005A	
MB 680-762798/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-762798/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-230302-C-21-B MS	Matrix Spike	Total Recoverable	Water	3005A	
680-230302-C-21-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Prep Batch: 762809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	7470A	
680-230304-2	MCI-MGWA-11	Total/NA	Water	7470A	
680-230304-3	MCI-MGWA-5	Total/NA	Water	7470A	
680-230304-4	MCI-MGWA-6	Total/NA	Water	7470A	
680-230304-5	MCI-MGWA-6A	Total/NA	Water	7470A	
680-230304-6	MCI-MGWC-3	Total/NA	Water	7470A	
680-230304-7	MCI-MGWC-12	Total/NA	Water	7470A	
680-230304-8	MCI-MGWC-1	Total/NA	Water	7470A	
680-230304-9	MCI-MGWC-2	Total/NA	Water	7470A	
680-230304-10	MCI-MGWC-7	Total/NA	Water	7470A	
680-230304-11	MCI-MGWC-8	Total/NA	Water	7470A	
MB 680-762809/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-762809/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-230306-A-6-E MS	Matrix Spike	Total/NA	Water	7470A	
680-230306-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

### Prep Batch: 762884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-12	MCI-AP1-FD-01	Total/NA	Water	7470A	
680-230304-13	MCI-AP1-FD-02	Total/NA	Water	7470A	
680-230304-14	MCI-AP1-FB-01	Total/NA	Water	7470A	
680-230304-15	MCI-AP1-FB-02	Total/NA	Water	7470A	
680-230304-16	MCI-AP1-EB-03	Total/NA	Water	7470A	
680-230304-17	MCI-AP1-EB-04	Total/NA	Water	7470A	
MB 680-762884/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-762884/2-A	Lab Control Sample	Total/NA	Water	7470A	

# QC Association Summary

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

Job ID: 680-230304-1

## Metals (Continued)

### Prep Batch: 762884 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230283-H-2-C MS	Matrix Spike	Total/NA	Water	7470A	
680-230283-H-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

### Analysis Batch: 762951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total Recoverable	Water	6020B	762796
680-230304-2	MCI-MGWA-11	Total Recoverable	Water	6020B	762796
680-230304-3	MCI-MGWA-5	Total Recoverable	Water	6020B	762796
680-230304-4	MCI-MGWA-6	Total Recoverable	Water	6020B	762796
680-230304-5	MCI-MGWA-6A	Total Recoverable	Water	6020B	762796
680-230304-6	MCI-MGWC-3	Total Recoverable	Water	6020B	762796
680-230304-7	MCI-MGWC-12	Total Recoverable	Water	6020B	762796
680-230304-8	MCI-MGWC-1	Total Recoverable	Water	6020B	762796
680-230304-9	MCI-MGWC-2	Total Recoverable	Water	6020B	762796
680-230304-10	MCI-MGWC-7	Total Recoverable	Water	6020B	762796
680-230304-11	MCI-MGWC-8	Total Recoverable	Water	6020B	762796
680-230304-12	MCI-AP1-FD-01	Total Recoverable	Water	6020B	762796
680-230304-13	MCI-AP1-FD-02	Total Recoverable	Water	6020B	762796
680-230304-14	MCI-AP1-FB-01	Total Recoverable	Water	6020B	762796
680-230304-15	MCI-AP1-FB-02	Total Recoverable	Water	6020B	762796
680-230304-16	MCI-AP1-EB-03	Total Recoverable	Water	6020B	762796
680-230304-17	MCI-AP1-EB-04	Total Recoverable	Water	6020B	762798
MB 680-762796/1-A	Method Blank	Total Recoverable	Water	6020B	762796
MB 680-762798/1-A	Method Blank	Total Recoverable	Water	6020B	762798
LCS 680-762796/2-A	Lab Control Sample	Total Recoverable	Water	6020B	762796
LCS 680-762798/2-A	Lab Control Sample	Total Recoverable	Water	6020B	762798
680-230302-C-21-B MS	Matrix Spike	Total Recoverable	Water	6020B	762798
680-230302-C-21-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	762798
752-2580-A-5-E MS	Matrix Spike	Total Recoverable	Water	6020B	762796
752-2580-A-5-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	762796

### Analysis Batch: 763201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	7470A	762809
680-230304-2	MCI-MGWA-11	Total/NA	Water	7470A	762809
680-230304-3	MCI-MGWA-5	Total/NA	Water	7470A	762809
680-230304-4	MCI-MGWA-6	Total/NA	Water	7470A	762809
680-230304-5	MCI-MGWA-6A	Total/NA	Water	7470A	762809
680-230304-6	MCI-MGWC-3	Total/NA	Water	7470A	762809
680-230304-7	MCI-MGWC-12	Total/NA	Water	7470A	762809
680-230304-8	MCI-MGWC-1	Total/NA	Water	7470A	762809
680-230304-9	MCI-MGWC-2	Total/NA	Water	7470A	762809
680-230304-10	MCI-MGWC-7	Total/NA	Water	7470A	762809
680-230304-11	MCI-MGWC-8	Total/NA	Water	7470A	762809
MB 680-762809/1-A	Method Blank	Total/NA	Water	7470A	762809
LCS 680-762809/2-A	Lab Control Sample	Total/NA	Water	7470A	762809
680-230306-A-6-E MS	Matrix Spike	Total/NA	Water	7470A	762809
680-230306-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	762809



# QC Association Summary

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

Job ID: 680-230304-1

## Metals

### Analysis Batch: 763249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-5	MCI-MGWA-6A	Total Recoverable	Water	6020B	762796
680-230304-6	MCI-MGWC-3	Total Recoverable	Water	6020B	762796
680-230304-7	MCI-MGWC-12	Total Recoverable	Water	6020B	762796
680-230304-8	MCI-MGWC-1	Total Recoverable	Water	6020B	762796
680-230304-9	MCI-MGWC-2	Total Recoverable	Water	6020B	762796
680-230304-10	MCI-MGWC-7	Total Recoverable	Water	6020B	762796
680-230304-11	MCI-MGWC-8	Total Recoverable	Water	6020B	762796
680-230304-12	MCI-AP1-FD-01	Total Recoverable	Water	6020B	762796
680-230304-13	MCI-AP1-FD-02	Total Recoverable	Water	6020B	762796
680-230304-14	MCI-AP1-FB-01	Total Recoverable	Water	6020B	762796
680-230304-15	MCI-AP1-FB-02	Total Recoverable	Water	6020B	762796
680-230304-16	MCI-AP1-EB-03	Total Recoverable	Water	6020B	762796

### Analysis Batch: 763358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-12	MCI-AP1-FD-01	Total/NA	Water	7470A	762884
680-230304-13	MCI-AP1-FD-02	Total/NA	Water	7470A	762884
680-230304-14	MCI-AP1-FB-01	Total/NA	Water	7470A	762884
680-230304-15	MCI-AP1-FB-02	Total/NA	Water	7470A	762884
680-230304-16	MCI-AP1-EB-03	Total/NA	Water	7470A	762884
680-230304-17	MCI-AP1-EB-04	Total/NA	Water	7470A	762884
MB 680-762884/1-A	Method Blank	Total/NA	Water	7470A	762884
LCS 680-762884/2-A	Lab Control Sample	Total/NA	Water	7470A	762884
680-230283-H-2-C MS	Matrix Spike	Total/NA	Water	7470A	762884
680-230283-H-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	762884

## General Chemistry

### Analysis Batch: 762877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-15	MCI-AP1-FB-02	Total/NA	Water	2540C-2011	
MB 680-762877/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-762877/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-762877/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-230302-A-16 DU	Duplicate	Total/NA	Water	2540C-2011	

### Analysis Batch: 762903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	2540C-2011	
680-230304-2	MCI-MGWA-11	Total/NA	Water	2540C-2011	
680-230304-3	MCI-MGWA-5	Total/NA	Water	2540C-2011	
680-230304-4	MCI-MGWA-6	Total/NA	Water	2540C-2011	
680-230304-5	MCI-MGWA-6A	Total/NA	Water	2540C-2011	
680-230304-6	MCI-MGWC-3	Total/NA	Water	2540C-2011	
680-230304-7	MCI-MGWC-12	Total/NA	Water	2540C-2011	
680-230304-8	MCI-MGWC-1	Total/NA	Water	2540C-2011	
680-230304-9	MCI-MGWC-2	Total/NA	Water	2540C-2011	
680-230304-10	MCI-MGWC-7	Total/NA	Water	2540C-2011	
680-230304-11	MCI-MGWC-8	Total/NA	Water	2540C-2011	
680-230304-12	MCI-AP1-FD-01	Total/NA	Water	2540C-2011	
680-230304-13	MCI-AP1-FD-02	Total/NA	Water	2540C-2011	

# QC Association Summary

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

Job ID: 680-230304-1

## General Chemistry (Continued)

### Analysis Batch: 762903 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-14	MCI-AP1-FB-01	Total/NA	Water	2540C-2011	
MB 680-762903/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-762903/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-762903/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-230304-10 DU	MCI-MGWC-7	Total/NA	Water	2540C-2011	
680-230304-12 DU	MCI-AP1-FD-01	Total/NA	Water	2540C-2011	

### Analysis Batch: 763352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-16	MCI-AP1-EB-03	Total/NA	Water	2540C-2011	
MB 680-763352/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-763352/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-763352/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
160-48887-D-1 DU	Duplicate	Total/NA	Water	2540C-2011	

### Analysis Batch: 763533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-17	MCI-AP1-EB-04	Total/NA	Water	2540C-2011	
MB 680-763533/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-763533/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-763533/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-230367-D-1 DU	Duplicate	Total/NA	Water	2540C-2011	

## Field Service / Mobile Lab

### Analysis Batch: 763021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	Field Sampling	
680-230304-2	MCI-MGWA-11	Total/NA	Water	Field Sampling	
680-230304-3	MCI-MGWA-5	Total/NA	Water	Field Sampling	
680-230304-4	MCI-MGWA-6	Total/NA	Water	Field Sampling	
680-230304-5	MCI-MGWA-6A	Total/NA	Water	Field Sampling	
680-230304-6	MCI-MGWC-3	Total/NA	Water	Field Sampling	
680-230304-7	MCI-MGWC-12	Total/NA	Water	Field Sampling	
680-230304-8	MCI-MGWC-1	Total/NA	Water	Field Sampling	
680-230304-9	MCI-MGWC-2	Total/NA	Water	Field Sampling	
680-230304-10	MCI-MGWC-7	Total/NA	Water	Field Sampling	
680-230304-11	MCI-MGWC-8	Total/NA	Water	Field Sampling	

# Lab Chronicle

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

Job ID: 680-230304-1

## Client Sample ID: MCI-MGWA-10

## Lab Sample ID: 680-230304-1

Date Collected: 02/07/23 10:15

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 21:09	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 14:59	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 16:46	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/07/23 10:15	T1C	EET SAV
Instrument ID: NOEQUIP										

## Client Sample ID: MCI-MGWA-11

## Lab Sample ID: 680-230304-2

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 21:22	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:03	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 16:48	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/07/23 12:10	T1C	EET SAV
Instrument ID: NOEQUIP										

## Client Sample ID: MCI-MGWA-5

## Lab Sample ID: 680-230304-3

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 21:35	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:07	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 16:56	JKL	EET SAV
Instrument ID: QuickTrace2										

# Lab Chronicle

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWA-5**

**Lab Sample ID: 680-230304-3**

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Total/NA	Analysis	Field Sampling		1			763021	02/07/23 13:40	T1C	EET SAV
Instrument ID: NOEQUIP										

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 21:48	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:11	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 16:58	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/07/23 12:05	T1C	EET SAV
Instrument ID: NOEQUIP										

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

**Lab Sample ID: 680-230304-5**

Date Collected: 02/07/23 10:40

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 22:01	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:23	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			763249	02/13/23 13:15	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 17:01	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/07/23 10:40	T1C	EET SAV
Instrument ID: NOEQUIP										

# Lab Chronicle

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-3**

**Lab Sample ID: 680-230304-6**

Date Collected: 02/07/23 14:20

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 22:15	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:27	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			763249	02/13/23 13:19	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 17:03	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/07/23 14:20	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 22:28	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:31	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			763249	02/13/23 13:23	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 17:06	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/07/23 15:05	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWC-1**

**Lab Sample ID: 680-230304-8**

Date Collected: 02/08/23 10:00

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 00:00	UI	EET SAV
Instrument ID: CICK										

# Lab Chronicle

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-1**

**Lab Sample ID: 680-230304-8**

Date Collected: 02/08/23 10:00

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:35	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		4			763249	02/13/23 13:27	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 17:08	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/08/23 10:00	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWC-2**

**Lab Sample ID: 680-230304-9**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 00:40	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:39	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		4			763249	02/13/23 13:30	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 17:11	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/08/23 09:55	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWC-7**

**Lab Sample ID: 680-230304-10**

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 00:53	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:43	BWR	EET SAV
Instrument ID: ICPMSC										

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# Lab Chronicle

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

Job ID: 680-230304-1

**Client Sample ID: MCI-MGWC-7**

**Lab Sample ID: 680-230304-10**

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		4			763249	02/13/23 13:34	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 17:14	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/08/23 11:50	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWC-8**

**Lab Sample ID: 680-230304-11**

Date Collected: 02/08/23 13:30

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 01:06	UI	EET SAV
Instrument ID: CICK										
Total/NA	Analysis	300.0-1993 R2.1	DL	5	5 mL	5 mL	763601	02/15/23 22:11	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:47	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		10			763249	02/13/23 13:38	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762809	02/10/23 08:21	JKL	EET SAV
Total/NA	Analysis	7470A		1			763201	02/10/23 17:16	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										
Total/NA	Analysis	Field Sampling		1			763021	02/08/23 13:30	T1C	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-FD-01**

**Lab Sample ID: 680-230304-12**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 01:19	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:51	BWR	EET SAV
Instrument ID: ICPMSC										

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# Lab Chronicle

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

Job ID: 680-230304-1

**Client Sample ID: MCI-AP1-FD-01**

**Lab Sample ID: 680-230304-12**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		4			763249	02/13/23 13:42	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762884	02/10/23 13:31	JKL	EET SAV
Total/NA	Analysis	7470A		1			763358	02/14/23 11:05	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-FD-02**

**Lab Sample ID: 680-230304-13**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 01:32	UI	EET SAV
Instrument ID: CICK										
Total/NA	Analysis	300.0-1993 R2.1	DL	5	5 mL	5 mL	763601	02/15/23 22:24	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:55	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		10			763249	02/13/23 13:46	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762884	02/10/23 13:31	JKL	EET SAV
Total/NA	Analysis	7470A		1			763358	02/14/23 11:07	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 22:41	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:59	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			763249	02/13/23 13:50	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762884	02/10/23 13:31	JKL	EET SAV
Total/NA	Analysis	7470A		1			763358	02/14/23 11:10	JKL	EET SAV
Instrument ID: QuickTrace2										

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# Lab Chronicle

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

Job ID: 680-230304-1

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	762903	02/10/23 13:46	PG	EET SAV

**Client Sample ID: MCI-AP1-FB-02**

**Lab Sample ID: 680-230304-15**

Date Collected: 02/08/23 10:25

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 01:46	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 16:12	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			763249	02/13/23 14:02	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762884	02/10/23 13:31	JKL	EET SAV
Total/NA	Analysis	7470A		1			763358	02/14/23 11:12	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	762877	02/10/23 13:00	PG	EET SAV
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-EB-03**

**Lab Sample ID: 680-230304-16**

Date Collected: 02/07/23 15:40

Matrix: Water

Date Received: 02/09/23 10:01

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	762939	02/11/23 22:54	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 16:16	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			763249	02/13/23 14:06	BWR	EET SAV
Instrument ID: ICPMSD										
Total/NA	Prep	7470A			50 mL	50 mL	762884	02/10/23 13:31	JKL	EET SAV
Total/NA	Analysis	7470A		1			763358	02/14/23 11:15	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	763352	02/14/23 13:00	PG	EET SAV
Instrument ID: NOEQUIP										

# Lab Chronicle

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

Job ID: 680-230304-1

**Client Sample ID: MCI-AP1-EB-04**

**Lab Sample ID: 680-230304-17**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 10:01

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	762940	02/12/23 01:59	UI	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	762798	02/10/23 05:56	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 22:30	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	762884	02/10/23 13:31	JKL	EET SAV
Total/NA	Analysis	7470A		1			763358	02/14/23 11:17	JKL	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	763533	02/15/23 11:50	PG	EET SAV
Instrument ID: NOEQUIP										

**Laboratory References:**

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: 680-230304-1

## Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87052	06-30-23
Georgia	State	E87052	06-30-23

- 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: 680-230304-1

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
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 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 SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Chain of Custody Record

<b>Client Information</b>		Sampler: ACC		Lab PM: Fuller David		Carrier Tracking No(s):		COC No:							
Client Contact: A Schmittker		Phone: 770-594-5998		E-Mail: david.fuller@et.eurofinsus.com				Page: 1 of 2							
Company: GA Power		Due Date Requested:		Analysis Requested Field Filtered Sample (Yes or No) Perform MS/MSD (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, Bi, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti) Radium 226 & 228 (SW-946 9315/9320)		Job #:		Preservation Codes:							
Address: 241 Ralph McGill Blvd SE		TAT Requested (days): Standard				A - HCL		M - Hexane							
City: Atlanta		Lab Project #: 68027747				B - NaOH		N - None							
State Zip: GA, 30308		PO #:				C - Zn Acetate		O - AsNaO2							
Phone: 404-506-7116(Tel)		Project #:				D - Nitric Acid		P - Na2O4S							
Email: SCS Contacts / ACC Contacts		SSOW#:		E - NaHSO4		Q - Na2SO3									
Project Name: Plant McIntosh - Ash Pond 1				F - MeOH		R - Na2S2O3									
Site: Georgia				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:											
						Task Code: MCI-CCR-ASSMT-2023S1									
						Special Instructions/Note: Full APP III + APP IV									
<b>Sample Identification</b>		Sample Date (mm/dd/yy)	Sample Time (hhmm)	Sample Type (C=Comp, G=grab)	Matrix (WG=ground water WS=surface water WQ=quality control)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers					
						D		I				D			
MCI- MGWA-10		02/07/23	1015	G	WG	N	N	✓	✓			✓	✓	8	pH= 5.46
MCI- MGWA-11		02/07/23	1210	G	WG	N	N	✓	✓			✓	✓	5	pH= 7.72
MCI- MGWA-5		02/07/23	1340	G	WG	N	N	✓	✓			✓	✓	5	pH= 7.85
MCI- MGWA-6		02/07/23	1205	G	WG	N	N	✓	✓			✓	✓	6	pH= 7.13
MCI- MGWA-6A		02/07/23	1040	G	WG	N	N	✓	✓			✓	✓	5	pH= 7.24
MCI- MGWC-3		02/07/23	1420	G	WG	N	N	✓	✓			✓	✓	5	pH= 7.01
MCI- MGWC-12		02/07/23	1505	G	WG	N	N	✓	✓			✓	✓	5	pH= 6.95
MCI- MGWC-1		02/08/23	1000	G	WG	N	N	✓	✓			✓	✓	5	pH= 7.28
MCI- MGWC-2		02/08/23	0955	G	WG	N	N	✓	✓			✓	✓	5	pH= 7.44
MCI- MGWC-7		02/08/23	1150	G	WG	N	N	✓	✓			✓	✓	5	pH= 7.43
MCI- MGWC-8		02/08/23	1330	G	WG	N	N	✓	✓			✓	✓	5	pH= 6.76
<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:			Date/Time: 2-9-23/0845		Company: ACC		Received by:								
Relinquished by:			Date/Time: 2-9-23/1000		Company: ACC		Received by:								
Relinquished by:			Date/Time:		Company:		Received by:								
Custody Seals Intact: Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 37/37 2.6/2.0 2.1/2.1											

### Chain of Custody Record

<b>Client Information</b>		Sampler: <u>A Schmittker</u> ACC		Lab PM: Fuller David		Carrier Tracking No(s)		COC No:						
Client Contact: SCS Contacts		Phone: <u>770 594 5998</u>		E-Mail: <u>david.fuller@et.eurofinsus.com</u>				Page: <u>2 of 2</u>						
Company: GA Power								Job #:						
Address: 241 Ralph McGill Blvd SE		Due Date Requested						Preservation Codes:						
City: Atlanta		TAT Requested (days): <u>Standard</u>						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		Lab Project #: <u>68027747</u>						Other:						
Phone: 404-506-7116(Tel)		PO #:												
Email: SCS Contacts / ACC Contacts		Project #:												
Project Name: Plant McIntosh - Ash Pond 1		SSOW#:												
Site: Georgia														
<b>Sample Identification</b>		Sample Date (mm/dd/yy)	Sample Time (hhmm)	Sample Type (C=comp, G=grab)	Matrix (WG=ground water, WS=surface water, WQ=quality control)	Field Filtered Sample (Yes or No)	Perform MS/MSD (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	Task Code: MCI-CCR-ASSMT-2023S1	Special Instructions/Note: Full APP III + APP IV
				Preservation Code:										
MCI-AP1-FD-01		02/08/23	/	G	WG	N	N	✓	✓	✓	✓	5	pH= NA	
MCI-AP1-FD-02		02/08/23	/	G	WG	N	N	✓	✓	✓	✓	5	pH= NA	
MCI-AP1-FB-01		02/07/23	1455	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA	
MCI-AP1-FB-02		02/08/23	1025	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA	
MCI-AP1-EB-03		02/07/23	1540	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA	
MCI-AP1-EB-04		02/08/23	1145	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA	
MCI-				G		N	N						pH=	
MCI-				G		N	N						pH=	
MCI-				G		N	N						pH=	
MCI-				G		N	N						pH=	
MCI-				G		N	N						pH=	
<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>						
Deliverable Requested I, II, III, IV, Other (specify)								<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:								
Relinquished by:		Date/Time: <u>2-9-23/0845</u>		Company: <u>ACC</u>		Received by:		Date/Time: <u>2-9-23/0845</u>		Company: <u>ACC</u>				
Relinquished by:		Date/Time: <u>2-9-23/1000</u>		Company: <u>ACC</u>		Received by:		Date/Time: <u>2/9/23 1051</u>		Company:				
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <u>2.7/2.7 2.6/2.6</u>										

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-230304-1

**Login Number: 230304**

**List Number: 1**

**Creator: Johnson, Corey M**

**List Source: Eurofins Savannah**

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	

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Lauren Hartley  
Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Generated 3/15/2023 12:39:55 PM

**JOB DESCRIPTION**

Plant McIntosh Ash Pond 1

**JOB NUMBER**

680-230304-2



# Eurofins Savannah

## Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

## Authorization



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Authorized for release by  
David Fuller, Project Manager  
[David.Fuller@et.eurofinsus.com](mailto:David.Fuller@et.eurofinsus.com)  
(770)344-8986

# Definitions/Glossary

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

Job ID: 680-230304-2

## 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: 680-230304-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-230304-1	MCI-MGWA-10	Water	02/07/23 10:15	02/09/23 10:01
680-230304-2	MCI-MGWA-11	Water	02/07/23 12:10	02/09/23 10:01
680-230304-3	MCI-MGWA-5	Water	02/07/23 13:40	02/09/23 10:01
680-230304-4	MCI-MGWA-6	Water	02/07/23 12:05	02/09/23 10:01
680-230304-5	MCI-MGWA-6A	Water	02/07/23 10:40	02/09/23 10:01
680-230304-6	MCI-MGWC-3	Water	02/07/23 14:20	02/09/23 10:01
680-230304-7	MCI-MGWC-12	Water	02/07/23 15:05	02/09/23 10:01
680-230304-8	MCI-MGWC-1	Water	02/08/23 10:00	02/09/23 10:01
680-230304-9	MCI-MGWC-2	Water	02/08/23 09:55	02/09/23 10:01
680-230304-10	MCI-MGWC-7	Water	02/08/23 11:50	02/09/23 10:01
680-230304-11	MCI-MGWC-8	Water	02/08/23 13:30	02/09/23 10:01
680-230304-12	MCI-AP1-FD-01	Water	02/08/23 00:00	02/09/23 10:01
680-230304-13	MCI-AP1-FD-02	Water	02/08/23 00:00	02/09/23 10:01
680-230304-14	MCI-AP1-FB-01	Water	02/07/23 14:55	02/09/23 10:01
680-230304-15	MCI-AP1-FB-02	Water	02/08/23 10:25	02/09/23 10:01
680-230304-16	MCI-AP1-EB-03	Water	02/07/23 15:40	02/09/23 10:01
680-230304-17	MCI-AP1-EB-04	Water	02/08/23 11:45	02/09/23 10:01

# Case Narrative

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

Job ID: 680-230304-2

**Job ID: 680-230304-2**

**Laboratory: Eurofins Savannah**

## Narrative

### Job Narrative 680-230304-2

#### Receipt

The samples were received on 2/9/2023 10:01 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 2.1°C, 2.6°C, 3.1°C and 3.7°C

#### Gas Flow Proportional Counter

Method 9315\_Ra226: Radium-226 batch 600299 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. MCI-MGWA-10 (680-230304-1), MCI-MGWA-11 (680-230304-2), MCI-MGWA-5 (680-230304-3), MCI-MGWA-6 (680-230304-4), MCI-MGWA-6A (680-230304-5), MCI-MGWC-3 (680-230304-6), MCI-MGWC-12 (680-230304-7), MCI-MGWC-1 (680-230304-8), MCI-MGWC-2 (680-230304-9), MCI-MGWC-7 (680-230304-10), MCI-MGWC-8 (680-230304-11), MCI-AP1-FD-01 (680-230304-12), MCI-AP1-FD-02 (680-230304-13), MCI-AP1-FB-01 (680-230304-14), MCI-AP1-FB-02 (680-230304-15), MCI-AP1-EB-03 (680-230304-16), MCI-AP1-EB-04 (680-230304-17), (LCS 160-600299/2-A), (MB 160-600299/1-A) and (680-230304-B-1-A DU)

Method 9320\_Ra228: Radium-228 batch 600302 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. MCI-MGWA-10 (680-230304-1), MCI-MGWA-11 (680-230304-2), MCI-MGWA-5 (680-230304-3), MCI-MGWA-6 (680-230304-4), MCI-MGWA-6A (680-230304-5), MCI-MGWC-3 (680-230304-6), MCI-MGWC-12 (680-230304-7), MCI-MGWC-1 (680-230304-8), MCI-MGWC-2 (680-230304-9), MCI-MGWC-7 (680-230304-10), MCI-MGWC-8 (680-230304-11), MCI-AP1-FD-01 (680-230304-12), MCI-AP1-FD-02 (680-230304-13), MCI-AP1-FB-01 (680-230304-14), MCI-AP1-FB-02 (680-230304-15), MCI-AP1-EB-03 (680-230304-16), MCI-AP1-EB-04 (680-230304-17), (LCS 160-600302/2-A), (MB 160-600302/1-A) and (680-230304-B-1-B DU)

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: 680-230304-2

**Client Sample ID: MCI-MGWA-10**

**Lab Sample ID: 680-230304-1**

Date Collected: 02/07/23 10:15

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.356		0.0990	0.104	1.00	0.0746	pCi/L	02/14/23 10:04	03/08/23 07:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.1		30 - 110					02/14/23 10:04	03/08/23 07:09	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	0.315	U	0.288	0.290	1.00	0.456	pCi/L	02/14/23 10:24	02/20/23 12:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.1		30 - 110					02/14/23 10:24	02/20/23 12:18	1
Y Carrier	88.2		30 - 110					02/14/23 10:24	02/20/23 12:18	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	0.671		0.305	0.308	5.00	0.456	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-MGWA-11**

**Lab Sample ID: 680-230304-2**

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.183		0.0791	0.0808	1.00	0.0850	pCi/L	02/14/23 10:04	03/08/23 07:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		30 - 110					02/14/23 10:04	03/08/23 07:09	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	0.675		0.374	0.379	1.00	0.539	pCi/L	02/14/23 10:24	02/20/23 12:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		30 - 110					02/14/23 10:24	02/20/23 12:20	1
Y Carrier	87.5		30 - 110					02/14/23 10:24	02/20/23 12:20	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-MGWA-11**

**Lab Sample ID: 680-230304-2**

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

**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	0.858		0.382	0.388	5.00	0.539	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-MGWA-5**

**Lab Sample ID: 680-230304-3**

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.113		0.0679	0.0687	1.00	0.0857	pCi/L	02/14/23 10:04	03/08/23 07:09	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	88.0		30 - 110					02/14/23 10:04	03/08/23 07:09	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	-0.0243	U	0.315	0.315	1.00	0.590	pCi/L	02/14/23 10:24	02/20/23 12:21	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	88.0		30 - 110					02/14/23 10:24	02/20/23 12:21	1
Y Carrier	85.6		30 - 110					02/14/23 10:24	02/20/23 12:21	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	0.0887	U	0.322	0.322	5.00	0.590	pCi/L		03/08/23 15:29	1

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

**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		0.0943	0.0979	1.00	0.0771	pCi/L	02/14/23 10:04	03/08/23 07:11	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	90.0		30 - 110					02/14/23 10:04	03/08/23 07:11	1

# Client Sample Results

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

Job ID: 680-230304-2

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.192	U	0.308	0.308	1.00	0.524	pCi/L	02/14/23 10:24	02/20/23 12:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		30 - 110					02/14/23 10:24	02/20/23 12:20	1
Y Carrier	90.1		30 - 110					02/14/23 10:24	02/20/23 12:20	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	0.487	U	0.322	0.323	5.00	0.524	pCi/L		03/08/23 15:29	1

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

**Lab Sample ID: 680-230304-5**

Date Collected: 02/07/23 10:40

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.506		0.122	0.131	1.00	0.0839	pCi/L	02/14/23 10:04	03/08/23 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					02/14/23 10:04	03/08/23 07:11	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	0.195	U	0.325	0.326	1.00	0.556	pCi/L	02/14/23 10:24	02/20/23 12:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					02/14/23 10:24	02/20/23 12:21	1
Y Carrier	87.1		30 - 110					02/14/23 10:24	02/20/23 12:21	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	0.701		0.347	0.351	5.00	0.556	pCi/L		03/08/23 15:29	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-MGWC-3**

**Lab Sample ID: 680-230304-6**

Date Collected: 02/07/23 14:20

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.39		0.194	0.231	1.00	0.0683	pCi/L	02/14/23 10:04	03/08/23 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		30 - 110					02/14/23 10:04	03/08/23 07:11	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	0.757		0.353	0.360	1.00	0.473	pCi/L	02/14/23 10:24	02/20/23 12:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		30 - 110					02/14/23 10:24	02/20/23 12:21	1
Y Carrier	89.0		30 - 110					02/14/23 10:24	02/20/23 12:21	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	2.14		0.403	0.428	5.00	0.473	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.263		0.0904	0.0934	1.00	0.0752	pCi/L	02/14/23 10:04	03/08/23 07:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.4		30 - 110					02/14/23 10:04	03/08/23 07:12	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	0.586		0.383	0.387	1.00	0.571	pCi/L	02/14/23 10:24	02/20/23 12:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.4		30 - 110					02/14/23 10:24	02/20/23 12:21	1
Y Carrier	86.7		30 - 110					02/14/23 10:24	02/20/23 12:21	1



# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

**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	0.849		0.394	0.398	5.00	0.571	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-MGWC-1**

**Lab Sample ID: 680-230304-8**

Date Collected: 02/08/23 10:00

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.39		0.201	0.237	1.00	0.0874	pCi/L	02/14/23 10:04	03/08/23 07:12	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	85.4		30 - 110					02/14/23 10:04	03/08/23 07:12	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	0.384	U	0.334	0.336	1.00	0.525	pCi/L	02/14/23 10:24	02/20/23 12:21	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	85.4		30 - 110					02/14/23 10:24	02/20/23 12:21	1
Y Carrier	87.5		30 - 110					02/14/23 10:24	02/20/23 12:21	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	1.77		0.390	0.411	5.00	0.525	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-MGWC-2**

**Lab Sample ID: 680-230304-9**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.215		0.0941	0.0960	1.00	0.107	pCi/L	02/14/23 10:04	03/08/23 07:12	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	82.9		30 - 110					02/14/23 10:04	03/08/23 07:12	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-MGWC-2**

**Lab Sample ID: 680-230304-9**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.584		0.369	0.373	1.00	0.541	pCi/L	02/14/23 10:24	02/20/23 12:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		30 - 110					02/14/23 10:24	02/20/23 12:21	1
Y Carrier	88.6		30 - 110					02/14/23 10:24	02/20/23 12:21	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	0.799		0.381	0.385	5.00	0.541	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-MGWC-7**

**Lab Sample ID: 680-230304-10**

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.18		0.195	0.222	1.00	0.0957	pCi/L	02/14/23 10:04	03/08/23 07:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		30 - 110					02/14/23 10:04	03/08/23 07:12	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	0.695		0.411	0.415	1.00	0.585	pCi/L	02/14/23 10:24	02/20/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	82.6		30 - 110					02/14/23 10:24	02/20/23 12:22	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	1.88		0.455	0.471	5.00	0.585	pCi/L		03/08/23 15:29	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-MGWC-8**

**Lab Sample ID: 680-230304-11**

Date Collected: 02/08/23 13:30

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.565		0.134	0.143	1.00	0.0951	pCi/L	02/14/23 10:04	03/08/23 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		30 - 110					02/14/23 10:04	03/08/23 07:14	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	0.544	U	0.371	0.374	1.00	0.556	pCi/L	02/14/23 10:24	02/20/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	86.7		30 - 110					02/14/23 10:24	02/20/23 12:22	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		0.394	0.400	5.00	0.556	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-AP1-FD-01**

**Lab Sample ID: 680-230304-12**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.218		0.0958	0.0977	1.00	0.113	pCi/L	02/14/23 10:04	03/08/23 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.7		30 - 110					02/14/23 10:04	03/08/23 07:14	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	0.459	U	0.354	0.356	1.00	0.544	pCi/L	02/14/23 10:24	02/20/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.7		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	89.7		30 - 110					02/14/23 10:24	02/20/23 12:22	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-AP1-FD-01**

**Lab Sample ID: 680-230304-12**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

**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	0.677		0.367	0.369	5.00	0.544	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-AP1-FD-02**

**Lab Sample ID: 680-230304-13**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.502		0.133	0.140	1.00	0.122	pCi/L	02/14/23 10:04	03/08/23 07:14	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	88.9		30 - 110					02/14/23 10:04	03/08/23 07:14	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	0.284	U	0.293	0.294	1.00	0.472	pCi/L	02/14/23 10:24	02/20/23 12:22	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	88.9		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	88.6		30 - 110					02/14/23 10:24	02/20/23 12:22	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	0.786		0.322	0.326	5.00	0.472	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0357	U	0.0603	0.0604	1.00	0.105	pCi/L	02/14/23 10:04	03/08/23 07:14	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	88.0		30 - 110					02/14/23 10:04	03/08/23 07:14	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.636		0.338	0.343	1.00	0.464	pCi/L	02/14/23 10:24	02/20/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	89.7		30 - 110					02/14/23 10:24	02/20/23 12:22	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	0.672		0.343	0.348	5.00	0.464	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-AP1-FB-02**

**Lab Sample ID: 680-230304-15**

Date Collected: 02/08/23 10:25

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0110	U	0.0512	0.0512	1.00	0.108	pCi/L	02/14/23 10:04	03/08/23 07:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					02/14/23 10:04	03/08/23 07:15	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	0.223	U	0.312	0.313	1.00	0.525	pCi/L	02/14/23 10:24	02/20/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	87.5		30 - 110					02/14/23 10:24	02/20/23 12:22	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	0.212	U	0.316	0.317	5.00	0.525	pCi/L		03/08/23 15:29	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-AP1-EB-03**

**Lab Sample ID: 680-230304-16**

Date Collected: 02/07/23 15:40

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0326	U	0.0536	0.0537	1.00	0.123	pCi/L	02/14/23 10:04	03/08/23 07:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		30 - 110					02/14/23 10:04	03/08/23 07:15	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	0.620		0.370	0.374	1.00	0.531	pCi/L	02/14/23 10:24	02/20/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	89.7		30 - 110					02/14/23 10:24	02/20/23 12:22	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	0.587		0.374	0.378	5.00	0.531	pCi/L		03/08/23 15:29	1

**Client Sample ID: MCI-AP1-EB-04**

**Lab Sample ID: 680-230304-17**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0182	U	0.0525	0.0525	1.00	0.0990	pCi/L	02/14/23 10:04	03/08/23 07:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.4		30 - 110					02/14/23 10:04	03/08/23 07:15	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	0.0253	U	0.350	0.350	1.00	0.640	pCi/L	02/14/23 10:24	02/20/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.4		30 - 110					02/14/23 10:24	02/20/23 12:22	1
Y Carrier	89.0		30 - 110					02/14/23 10:24	02/20/23 12:22	1

# Client Sample Results

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

Job ID: 680-230304-2

**Client Sample ID: MCI-AP1-EB-04**

**Lab Sample ID: 680-230304-17**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 10:01

**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	0.0435	U	0.354	0.354	5.00	0.640	pCi/L		03/08/23 15:29	1

- 1
- 2
- 3
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- 5
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- 10
- 11
- 12
- 13

# Tracer/Carrier Summary

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

Job ID: 680-230304-2

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
680-230304-1	MCI-MGWA-10	95.1	
680-230304-1 DU	MCI-MGWA-10	84.0	
680-230304-2	MCI-MGWA-11	93.7	
680-230304-3	MCI-MGWA-5	88.0	
680-230304-4	MCI-MGWA-6	90.0	
680-230304-5	MCI-MGWA-6A	86.3	
680-230304-6	MCI-MGWC-3	91.7	
680-230304-7	MCI-MGWC-12	87.4	
680-230304-8	MCI-MGWC-1	85.4	
680-230304-9	MCI-MGWC-2	82.9	
680-230304-10	MCI-MGWC-7	75.1	
680-230304-11	MCI-MGWC-8	84.3	
680-230304-12	MCI-AP1-FD-01	85.7	
680-230304-13	MCI-AP1-FD-02	88.9	
680-230304-14	MCI-AP1-FB-01	88.0	
680-230304-15	MCI-AP1-FB-02	93.4	
680-230304-16	MCI-AP1-EB-03	82.3	
680-230304-17	MCI-AP1-EB-04	85.4	
LCS 160-600299/2-A	Lab Control Sample	87.7	
MB 160-600299/1-A	Method Blank	88.6	

**Tracer/Carrier Legend**  
 Ba = Ba Carrier

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
680-230304-1	MCI-MGWA-10	95.1	88.2
680-230304-1 DU	MCI-MGWA-10	84.0	86.7
680-230304-2	MCI-MGWA-11	93.7	87.5
680-230304-3	MCI-MGWA-5	88.0	85.6
680-230304-4	MCI-MGWA-6	90.0	90.1
680-230304-5	MCI-MGWA-6A	86.3	87.1
680-230304-6	MCI-MGWC-3	91.7	89.0
680-230304-7	MCI-MGWC-12	87.4	86.7
680-230304-8	MCI-MGWC-1	85.4	87.5
680-230304-9	MCI-MGWC-2	82.9	88.6
680-230304-10	MCI-MGWC-7	75.1	82.6
680-230304-11	MCI-MGWC-8	84.3	86.7
680-230304-12	MCI-AP1-FD-01	85.7	89.7
680-230304-13	MCI-AP1-FD-02	88.9	88.6
680-230304-14	MCI-AP1-FB-01	88.0	89.7
680-230304-15	MCI-AP1-FB-02	93.4	87.5
680-230304-16	MCI-AP1-EB-03	82.3	89.7
680-230304-17	MCI-AP1-EB-04	85.4	89.0
LCS 160-600302/2-A	Lab Control Sample	87.7	91.6
MB 160-600302/1-A	Method Blank	88.6	86.7



# Tracer/Carrier Summary

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

Job ID: 680-230304-2

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**Tracer/Carrier Legend**

Ba = Ba Carrier

Y = Y Carrier

1

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# QC Sample Results

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

Job ID: 680-230304-2

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

**Lab Sample ID: MB 160-600299/1-A**  
**Matrix: Water**  
**Analysis Batch: 602826**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 600299**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01650	U	0.0433	0.0433	1.00	0.0822	pCi/L	02/14/23 10:04	03/08/23 07:07	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	88.6		30 - 110				02/14/23 10:04		03/08/23 07:07	1

**Lab Sample ID: LCS 160-600299/2-A**  
**Matrix: Water**  
**Analysis Batch: 602826**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 600299**

Analyte	LCS		Spike	LCS	Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	LCS Qual	Added	Result	Uncert. (2σ+/-)					
Radium-226			11.3	11.65	1.19	1.00	0.0849	pCi/L	103	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	87.7		30 - 110							

**Lab Sample ID: 680-230304-1 DU**  
**Matrix: Water**  
**Analysis Batch: 602826**

**Client Sample ID: MCI-MGWA-10**  
**Prep Type: Total/NA**  
**Prep Batch: 600299**

Analyte	Sample		DU		Total	RL	MDC	Unit	RER	RER Limit
	Result	Sample Qual	Result	DU Qual	Uncert. (2σ+/-)					
Radium-226	0.356		0.3119		0.103	1.00	0.0810	pCi/L	0.21	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	84.0		30 - 110							

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

**Lab Sample ID: MB 160-600302/1-A**  
**Matrix: Water**  
**Analysis Batch: 601020**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 600302**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4893	U	0.346	0.349	1.00	0.521	pCi/L	02/14/23 10:24	02/20/23 12:27	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	88.6		30 - 110				02/14/23 10:24		02/20/23 12:27	1
Y Carrier	86.7		30 - 110				02/14/23 10:24		02/20/23 12:27	1

# QC Sample Results

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

Job ID: 680-230304-2

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: LCS 160-600302/2-A**  
**Matrix: Water**  
**Analysis Batch: 601020**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 600302**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.18	8.657		1.20	1.00	0.482	pCi/L	106	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.7		30 - 110
Y Carrier	91.6		30 - 110

**Lab Sample ID: 680-230304-1 DU**  
**Matrix: Water**  
**Analysis Batch: 601021**

**Client Sample ID: MCI-MGWA-10**  
**Prep Type: Total/NA**  
**Prep Batch: 600302**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.315	U	0.2559	U	0.317	1.00	0.524	pCi/L	0.1	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	84.0		30 - 110
Y Carrier	86.7		30 - 110

# QC Association Summary

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

Job ID: 680-230304-2

## Rad

### Prep Batch: 600299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	PrecSep-21	
680-230304-2	MCI-MGWA-11	Total/NA	Water	PrecSep-21	
680-230304-3	MCI-MGWA-5	Total/NA	Water	PrecSep-21	
680-230304-4	MCI-MGWA-6	Total/NA	Water	PrecSep-21	
680-230304-5	MCI-MGWA-6A	Total/NA	Water	PrecSep-21	
680-230304-6	MCI-MGWC-3	Total/NA	Water	PrecSep-21	
680-230304-7	MCI-MGWC-12	Total/NA	Water	PrecSep-21	
680-230304-8	MCI-MGWC-1	Total/NA	Water	PrecSep-21	
680-230304-9	MCI-MGWC-2	Total/NA	Water	PrecSep-21	
680-230304-10	MCI-MGWC-7	Total/NA	Water	PrecSep-21	
680-230304-11	MCI-MGWC-8	Total/NA	Water	PrecSep-21	
680-230304-12	MCI-AP1-FD-01	Total/NA	Water	PrecSep-21	
680-230304-13	MCI-AP1-FD-02	Total/NA	Water	PrecSep-21	
680-230304-14	MCI-AP1-FB-01	Total/NA	Water	PrecSep-21	
680-230304-15	MCI-AP1-FB-02	Total/NA	Water	PrecSep-21	
680-230304-16	MCI-AP1-EB-03	Total/NA	Water	PrecSep-21	
680-230304-17	MCI-AP1-EB-04	Total/NA	Water	PrecSep-21	
MB 160-600299/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-600299/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
680-230304-1 DU	MCI-MGWA-10	Total/NA	Water	PrecSep-21	

### Prep Batch: 600302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	PrecSep_0	
680-230304-2	MCI-MGWA-11	Total/NA	Water	PrecSep_0	
680-230304-3	MCI-MGWA-5	Total/NA	Water	PrecSep_0	
680-230304-4	MCI-MGWA-6	Total/NA	Water	PrecSep_0	
680-230304-5	MCI-MGWA-6A	Total/NA	Water	PrecSep_0	
680-230304-6	MCI-MGWC-3	Total/NA	Water	PrecSep_0	
680-230304-7	MCI-MGWC-12	Total/NA	Water	PrecSep_0	
680-230304-8	MCI-MGWC-1	Total/NA	Water	PrecSep_0	
680-230304-9	MCI-MGWC-2	Total/NA	Water	PrecSep_0	
680-230304-10	MCI-MGWC-7	Total/NA	Water	PrecSep_0	
680-230304-11	MCI-MGWC-8	Total/NA	Water	PrecSep_0	
680-230304-12	MCI-AP1-FD-01	Total/NA	Water	PrecSep_0	
680-230304-13	MCI-AP1-FD-02	Total/NA	Water	PrecSep_0	
680-230304-14	MCI-AP1-FB-01	Total/NA	Water	PrecSep_0	
680-230304-15	MCI-AP1-FB-02	Total/NA	Water	PrecSep_0	
680-230304-16	MCI-AP1-EB-03	Total/NA	Water	PrecSep_0	
680-230304-17	MCI-AP1-EB-04	Total/NA	Water	PrecSep_0	
MB 160-600302/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-600302/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
680-230304-1 DU	MCI-MGWA-10	Total/NA	Water	PrecSep_0	

# Lab Chronicle

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

Job ID: 680-230304-2

**Client Sample ID: MCI-MGWA-10**

**Lab Sample ID: 680-230304-1**

Date Collected: 02/07/23 10:15

Matrix: Water

Date Received: 02/09/23 10:01

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			1003.23 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:09	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			1003.23 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:18	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWA-11**

**Lab Sample ID: 680-230304-2**

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

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			992.57 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:09	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			992.57 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:20	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWA-5**

**Lab Sample ID: 680-230304-3**

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

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			999.30 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:09	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			999.30 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:21	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

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			1004.00 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:11	FLC	EET SL
Instrument ID: GFPCRED										

# Lab Chronicle

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

Job ID: 680-230304-2

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

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			1004.00 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:20	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

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

**Lab Sample ID: 680-230304-5**

Date Collected: 02/07/23 10:40

Matrix: Water

Date Received: 02/09/23 10:01

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			1009.52 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:11	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			1009.52 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:21	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWC-3**

**Lab Sample ID: 680-230304-6**

Date Collected: 02/07/23 14:20

Matrix: Water

Date Received: 02/09/23 10:01

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			995.61 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:11	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			995.61 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:21	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

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			995.07 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:12	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			995.07 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:21	FLC	EET SL
Instrument ID: GFPCBLUE										

# Lab Chronicle

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

Job ID: 680-230304-2

## Client Sample ID: MCI-MGWC-12

## Lab Sample ID: 680-230304-7

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

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			602873	03/08/23 15:29	SCB	EET SL

## Client Sample ID: MCI-MGWC-1

## Lab Sample ID: 680-230304-8

Date Collected: 02/08/23 10:00

Matrix: Water

Date Received: 02/09/23 10:01

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			997.03 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:12	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			997.03 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:21	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MCI-MGWC-2

## Lab Sample ID: 680-230304-9

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 10:01

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			993.16 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:12	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			993.16 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:21	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

## Client Sample ID: MCI-MGWC-7

## Lab Sample ID: 680-230304-10

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

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			1003.70 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602826	03/08/23 07:12	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			1003.70 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

# Lab Chronicle

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

Job ID: 680-230304-2

**Client Sample ID: MCI-MGWC-8**

**Lab Sample ID: 680-230304-11**

Date Collected: 02/08/23 13:30

Matrix: Water

Date Received: 02/09/23 10:01

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			1001.73 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602860	03/08/23 07:14	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			1001.73 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-FD-01**

**Lab Sample ID: 680-230304-12**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

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			992.38 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602860	03/08/23 07:14	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			992.38 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-FD-02**

**Lab Sample ID: 680-230304-13**

Date Collected: 02/08/23 00:00

Matrix: Water

Date Received: 02/09/23 10:01

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			1000.23 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602860	03/08/23 07:14	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			1000.23 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

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			1000.28 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602860	03/08/23 07:14	FLC	EET SL
Instrument ID: GFPCBLUE										



# Lab Chronicle

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

Job ID: 680-230304-2

**Client Sample ID: MCI-AP1-FB-01**

**Lab Sample ID: 680-230304-14**

Date Collected: 02/07/23 14:55

Matrix: Water

Date Received: 02/09/23 10:01

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			1000.28 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-FB-02**

**Lab Sample ID: 680-230304-15**

Date Collected: 02/08/23 10:25

Matrix: Water

Date Received: 02/09/23 10:01

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			994.47 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602860	03/08/23 07:15	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			994.47 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-EB-03**

**Lab Sample ID: 680-230304-16**

Date Collected: 02/07/23 15:40

Matrix: Water

Date Received: 02/09/23 10:01

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			993.91 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602860	03/08/23 07:15	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			993.91 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			602873	03/08/23 15:29	SCB	EET SL
Instrument ID: NOEQUIP										

**Client Sample ID: MCI-AP1-EB-04**

**Lab Sample ID: 680-230304-17**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 10:01

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			990.42 mL	1.0 g	600299	02/14/23 10:04	DJP	EET SL
Total/NA	Analysis	9315		1			602860	03/08/23 07:15	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			990.42 mL	1.0 g	600302	02/14/23 10:24	DJP	EET SL
Total/NA	Analysis	9320		1			601021	02/20/23 12:22	FLC	EET SL
Instrument ID: GFPCBLUE										

# Lab Chronicle

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

Job ID: 680-230304-2

**Client Sample ID: MCI-AP1-EB-04**

**Lab Sample ID: 680-230304-17**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 10:01

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			602873	03/08/23 15:29	SCB	EET SL

**Laboratory References:**

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

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# Accreditation/Certification Summary

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

Job ID: 680-230304-2

## 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

- 1
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- 13

# Method Summary

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

Job ID: 680-230304-2

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: ACC		Lab PM: Fuller David		Carrier Tracking No(s):		COC No:	
Client Contact: A Schmittker		Phone: 770-594-5998		E-Mail: david.fuller@et.eurofinsus.com				Page: 1 of 2	
Company: GA Power		Address: 241 Ralph McGill Blvd SE		City: Atlanta		State Zip: GA, 30308		Job #:	
Phone: 404-506-7116(Tel)		Email: SCS Contacts / ACC Contacts		Project Name: Plant McIntosh - Ash Pond 1		Site: Georgia		Analysis Requested	
Due Date Requested:		TAT Requested (days): Standard		Lab Project #: 68027747		PO #:		Project #:	
SSOW#:		Sample Date (mm/dd/yy)		Sample Time (hhmm)		Sample Type (C=Comp, G=grab)		Matrix (WG=ground water, WS=surface water, WQ=quality control)	
Field Filtered Sample (Yes or No)		Perform MS/MSD (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-946 9315/9320)		Total Number of containers		Task Code: MCI-CCR-ASSMT-2023S1		Special Instructions/Note: Full APP III + APP IV		Other:	
Preservation Codes:		A - HCL		M - Hexane		B - NaOH		N - None	
C - Zn Acetate		O - AsNaO2		P - Na2O4S		Q - Na2SO3		R - Na2S2O3	
D - Nitric Acid		S - H2SO4		T - TSP Dodecahydrate		U - Acetone		V - MCAA	
E - NaHSO4		W - pH 4-5		Z - other (specify)					
F - MeOH									
G - Amchlor									
H - Ascorbic Acid									
I - Ice									
J - DI Water									
K - EDTA									
L - EDA									
Sample Identification		Preservation Code:		D		I		D	
MCI- MGWA-10	02/07/23	1015	G	WG	N	N	✓	✓	✓
MCI- MGWA-11	02/07/23	1210	G	WG	N	N	✓	✓	✓
MCI- MGWA-5	02/07/23	1340	G	WG	N	N	✓	✓	✓
MCI- MGWA-6	02/07/23	1205	G	WG	N	N	✓	✓	✓
MCI- MGWA-6A	02/07/23	1040	G	WG	N	N	✓	✓	✓
MCI- MGWC-3	02/07/23	1420	G	WG	N	N	✓	✓	✓
MCI- MGWC-12	02/07/23	1505	G	WG	N	N	✓	✓	✓
MCI- MGWC-1	02/08/23	1000	G	WG	N	N	✓	✓	✓
MCI- MGWC-2	02/08/23	0955	G	WG	N	N	✓	✓	✓
MCI- MGWC-7	02/08/23	1150	G	WG	N	N	✓	✓	✓
MCI- MGWC-8	02/08/23	1330	G	WG	N	N	✓	✓	✓
<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:		Date/Time: 2-9-23/0845		Company: ACC		Received by:		Date/Time: 2-9-23/0845	
Relinquished by:		Date/Time: 2-9-23/1000		Company: ACC		Received by:		Date/Time: 2/9/23 1001	
Relinquished 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: 37/37 2.6/2.0 2.1/2.1					

### Chain of Custody Record

<b>Client Information</b>		Sampler: <u>A Schmittker</u> ACC		Lab PM: Fuller David		Carrier Tracking No(s)		COC No:					
Client Contact: SCS Contacts		Phone: <u>770 594 5998</u>		E-Mail: <u>david.fuller@et.eurofinsus.com</u>				Page: <u>2 of 2</u>					
Company: GA Power						<b>Analysis Requested</b>		Job #:					
Address: 241 Ralph McGill Blvd SE		Due Date Requested						Preservation Codes:					
City: Atlanta		TAT Requested (days): <u>Standard</u>						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		Lab Project #: <u>68027747</u>						Other:					
Phone: 404-506-7116(Tel)		PO #:						Task Code MCI-CCR-ASSMT-2023S1					
Email: SCS Contacts / ACC Contacts		Project #:						Special Instructions/Note: Full APP III + APP IV					
Project Name: Plant McIntosh - Ash Pond 1		SSOW#:											
Site: Georgia													
<b>Sample Identification</b>		Sample Date (mm/dd/yy)	Sample Time (hhmm)	Sample Type (C=comp, G=grab)	Matrix (WG=ground water, WS=surface water, WQ=quality control)	Field Filtered Sample (Yes or No)	Perform MS/MSD (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:									
MCI-AP1-FD-01		02/08/23	/	G	WG	N	N	✓	✓	✓	✓	5	pH= NA
MCI-AP1-FD-02		02/08/23	/	G	WG	N	N	✓	✓	✓	✓	5	pH= NA
MCI-AP1-FB-01		02/07/23	1455	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA
MCI-AP1-FB-02		02/08/23	1025	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA
MCI-AP1-EB-03		02/07/23	1540	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA
MCI-AP1-EB-04		02/08/23	1145	G	WQ	N	N	✓	✓	✓	✓	5	pH= NA
MCI-				G		N	N						pH=
MCI-				G		N	N						pH=
MCI-				G		N	N						pH=
MCI-				G		N	N						pH=
MCI-				G		N	N						pH=
<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>					
Deliverable Requested I, II, III, IV, Other (specify)								<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements													
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:							
Relinquished by: <u>[Signature]</u>		Date/Time: <u>2-9-23/0845</u>		Company: <u>ACC</u>		Received by: <u>[Signature]</u>		Date/Time: <u>2-9-23/0845</u>		Company: <u>ACC</u>			
Relinquished by: <u>[Signature]</u>		Date/Time: <u>2-9-23/1000</u>		Company: <u>ACC</u>		Received by: <u>[Signature]</u>		Date/Time: <u>2/9/23 1051</u>		Company: <u>[Signature]</u>			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:			
Custody Seals Intact: Δ Yes Δ No		Custody Seal No				Cooler Temperature(s) °C and Other Remarks: <u>2.7/2.7 2.6/2.6</u>							

# Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>		Lab PM Fuller, David	Carrier Tracking No(s)	COC No 680-728655.1
Shipping/Receiving		E-Mail David.Fuller@et.eurofins.com	State of Origin Georgia	Page Page 1 of 2
Company TestAmerica Laboratories, Inc.		Accreditations Required (See note): Dept. of Defense ELAP - ANAB; ISO/IEC 17025 - ANAB; NEL		
Address 13715 Rider Trail North,		Job # 680-230304-2		
City Earth City		<b>Analysis Requested</b> 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 - EDTA 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 Y - Trizma Z - other (specify)		
State, Zip MO, 63045				
Phone 314-298-9666(Tel) 314-298-8757(Fax)				
PO #				
WC #				
Project # Plant McIntosh Ash Pond 1		<b>Field Filtered Sample (Yes or No)</b> <b>Perform MS/MSD (Yes or No)</b> <b>9315 Ra226/PreSep_21 Radium-226</b> <b>Radium-228</b> <b>9320 Ra226/PreSep_0 Radium-228</b> <b>9326 Ra226/PreSep_0 Radium-226</b> <b>9326 Ra226/PreSep_21 Radium-226</b> <b>9326 Ra226/PreSep_21 Radium-226</b>		
Site SSOW#		<b>Field Filtered Sample (Yes or No)</b> <b>Perform MS/MSD (Yes or No)</b> <b>9315 Ra226/PreSep_21 Radium-226</b> <b>Radium-228</b> <b>9320 Ra226/PreSep_0 Radium-228</b> <b>9326 Ra226/PreSep_0 Radium-226</b> <b>9326 Ra226/PreSep_21 Radium-226</b>		
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Special Instructions/Note:</b>		
Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Sealed, On-water, At-tissue, A=Ali)	Preservation Code
2/7/23	10:15 Eastern	Water	Water	
2/7/23	12:10 Eastern	Water	Water	
2/7/23	13:40 Eastern	Water	Water	
2/7/23	12:05 Eastern	Water	Water	
2/7/23	10:40 Eastern	Water	Water	
2/7/23	14:20 Eastern	Water	Water	
2/7/23	15:05 Eastern	Water	Water	
2/8/23	10:00 Eastern	Water	Water	
2/8/23	09:55 Eastern	Water	Water	
2/8/23	Eastern	Water	Water	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC 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 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</p>				
<b>Possible Hazard Identification</b>				
Unconfirmed				
Deliverable Requested I, II, III, IV, Other (specify)				
Primary Deliverable Rank: 2				
Special Instructions/QC Requirements:				
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For    Months				
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Received by: <b>FedEx</b>				
Date/Time: <b>2/13/23 09:12</b>				
Company: <b>ETA STL</b>				
Received by: <b>Shanley - Shanley</b>				
Date/Time: <b>2/13/23 09:12</b>				
Company: <b>ETA STL</b>				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Cooler Temperature(s) °C and Other Remarks:				

# Chain of Custody Record

**eurofins Savannah**  
 5102 LaRoche Avenue  
 Savannah, GA 31404  
 Phone: 912-354-7858 Fax: 912-352-0165

<b>Client Information (Sub Contract Lab)</b>		Lab PM Fuller, David	Carrier Tracking No(s)	COC No. 680-726855.2
Client Contact		E-Mail David.Fuller@et.eurofins.com	State of Origin Georgia	Page Page 2 of 2
Shipping/Receiving		Accreditations Required (See note) Dept. of Defense ELAP - ANAB, ISO/IEC 17025 - ANAB, NEL	Job # 680-230304-2	
Company TestAmerica Laboratories, Inc.		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 Y - Trizma Z - other (specify) 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:		
Address 13715 Rider Trail North,		<b>Analysis Requested</b>		
City Earth City				
State, Zip MO, 63045				
Phone 314-298-8566(Tel) 314-298-8757(Fax)				
Email				
Project # 68027747				
SSOV#				
Due Date Requested: 3/14/2023				
TAT Requested (days):				
PO #				
WO #				
Sample Date				
Sample Time				
Sample Type (C=Comp, G=grab)				
Matrix (W=Water, S=Solid, O=Wastewat, IS=Issue, A=Air)				
Sample Identification - Client ID (Lab ID)		Field Filtered Sample (Yes or No)		
		Performance MSMSD (Yes or No)		
		920_Ra228/PreSep_0 Radium-228		
		915_Ra226/PreSep_21 Radium-226		
		Ra226Ra228_GFP/Combined Radium-226 and Radium-228		
		Total Number of Containers		
		Special Instructions/Note:		
MCI-MGWC-7 (680-230304-10)		2		
MCI-MGWC-8 (680-230304-11)		2		
MCI-AP1-FD-01 (680-230304-12)		2		
MCI-AP1-FD-02 (680-230304-13)		2		
MCI-AP1-FB-01 (680-230304-14)		2		
MCI-AP1-FB-02 (680-230304-15)		2		
MCI-AP1-EB-03 (680-230304-16)		2		
MCI-AP1-EB-04 (680-230304-17)		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/analyte/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: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received by: **FEDEX**  
 Received by: **Diana Shantay - Shantay** 2/13/23 0812  
 Received by: \_\_\_\_\_  
 Company: **FEDEX**  
 Company: **ETASTL**  
 Company: \_\_\_\_\_

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: 680-230304-2

**Login Number: 230304**

**List Source: Eurofins Savannah**

**List Number: 1**

**Creator: Johnson, Corey M**

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: 680-230304-2

**Login Number: 230304**

**List Number: 2**

**Creator: Sharkey-Gonzalez, Briana L**

**List Source: Eurofins St. Louis**

**List Creation: 02/13/23 11:08 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	



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Lauren Hartley  
Southern Company  
241 Ralph McGill Blvd SE  
B10185  
Atlanta, Georgia 30308

Generated 2/21/2023 8:53:23 AM

**JOB DESCRIPTION**

Plant McIntosh Ash Pond 1

**JOB NUMBER**

680-230304-3

# Eurofins Savannah

## Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

## Authorization



Generated  
2/21/2023 8:53:23 AM

Authorized for release by  
David Fuller, Project Manager  
[David.Fuller@et.eurofinsus.com](mailto:David.Fuller@et.eurofinsus.com)  
(770)344-8986

## Definitions/Glossary

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

Job ID: 680-230304-3

### 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

# Sample Summary

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

Job ID: 680-230304-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-230304-1	MCI-MGWA-10	Water	02/07/23 10:15	02/09/23 10:01
680-230304-2	MCI-MGWA-11	Water	02/07/23 12:10	02/09/23 10:01
680-230304-3	MCI-MGWA-5	Water	02/07/23 13:40	02/09/23 10:01
680-230304-4	MCI-MGWA-6	Water	02/07/23 12:05	02/09/23 10:01
680-230304-5	MCI-MGWA-6A	Water	02/07/23 10:40	02/09/23 10:01
680-230304-6	MCI-MGWC-3	Water	02/07/23 14:20	02/09/23 10:01
680-230304-7	MCI-MGWC-12	Water	02/07/23 15:05	02/09/23 10:01
680-230304-8	MCI-MGWC-1	Water	02/08/23 10:00	02/09/23 10:01
680-230304-9	MCI-MGWC-2	Water	02/08/23 09:55	02/09/23 10:01
680-230304-10	MCI-MGWC-7	Water	02/08/23 11:50	02/09/23 10:01
680-230304-11	MCI-MGWC-8	Water	02/08/23 13:30	02/09/23 10:01



# Case Narrative

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

Job ID: 680-230304-3

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**Job ID: 680-230304-3**

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**Laboratory: Eurofins Savannah**

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**Narrative**

**Job Narrative  
680-230304-3**

**Receipt**

The samples were received on 2/9/2023 10:01 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 2.1°C, 2.6°C, 3.1°C and 3.7°C

**Metals**

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

**General Chemistry**

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

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# Client Sample Results

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

Job ID: 680-230304-3

**Client Sample ID: MCI-MGWA-10**

**Lab Sample ID: 680-230304-1**

Date Collected: 02/07/23 10:15

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1.1		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 14:59	1
Magnesium	1.1		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 14:59	1
Sodium	6.3		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 14:59	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	16		5.0	5.0	mg/L			02/14/23 20:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	16		5.0	5.0	mg/L			02/14/23 20:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 20:52	1

**Client Sample ID: MCI-MGWA-11**

**Lab Sample ID: 680-230304-2**

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1.9		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:03	1
Magnesium	10		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:03	1
Sodium	9.5		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:03	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	140		5.0	5.0	mg/L			02/14/23 21:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	140		5.0	5.0	mg/L			02/14/23 21:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 21:02	1

**Client Sample ID: MCI-MGWA-5**

**Lab Sample ID: 680-230304-3**

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1.1		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:07	1
Magnesium	11		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:07	1
Sodium	6.8		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:07	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	110		5.0	5.0	mg/L			02/14/23 21:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	110		5.0	5.0	mg/L			02/14/23 21:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 21:31	1



# Client Sample Results

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

Job ID: 680-230304-3

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	0.68		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:11	1
Magnesium	2.6		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:11	1
Sodium	4.5		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:11	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	280		5.0	5.0	mg/L			02/14/23 20:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	280		5.0	5.0	mg/L			02/14/23 20:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 20:44	1

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

**Lab Sample ID: 680-230304-5**

Date Collected: 02/07/23 10:40

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	0.61		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:23	1
Magnesium	2.6		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:23	1
Sodium	4.3		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	260		5.0	5.0	mg/L			02/15/23 03:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	260		5.0	5.0	mg/L			02/15/23 03:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/15/23 03:01	1

**Client Sample ID: MCI-MGWC-3**

**Lab Sample ID: 680-230304-6**

Date Collected: 02/07/23 14:20

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1.6		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:27	1
Magnesium	5.5		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:27	1
Sodium	16		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	210		5.0	5.0	mg/L			02/14/23 21:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	210		5.0	5.0	mg/L			02/14/23 21:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 21:21	1

# Client Sample Results

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

Job ID: 680-230304-3

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1.9		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:31	1
Magnesium	12		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:31	1
Sodium	13		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:31	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	140		5.0	5.0	mg/L			02/14/23 20:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	140		5.0	5.0	mg/L			02/14/23 20:34	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 20:34	1

**Client Sample ID: MCI-MGWC-1**

**Lab Sample ID: 680-230304-8**

Date Collected: 02/08/23 10:00

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	2.0		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:35	1
Magnesium	5.8		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:35	1
Sodium	20		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:35	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	190		5.0	5.0	mg/L			02/15/23 00:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	190		5.0	5.0	mg/L			02/15/23 00:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/15/23 00:07	1

**Client Sample ID: MCI-MGWC-2**

**Lab Sample ID: 680-230304-9**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	2.0		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:39	1
Magnesium	17		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:39	1
Sodium	31		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:39	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	220		5.0	5.0	mg/L			02/14/23 21:11	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	220		5.0	5.0	mg/L			02/14/23 21:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 21:11	1

# Client Sample Results

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

Job ID: 680-230304-3

**Client Sample ID: MCI-MGWC-7**

**Lab Sample ID: 680-230304-10**

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	3.3		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:43	1
Magnesium	6.8		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:43	1
Sodium	43		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	49		5.0	5.0	mg/L			02/14/23 10:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	49		5.0	5.0	mg/L			02/14/23 10:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 10:38	1

**Client Sample ID: MCI-MGWC-8**

**Lab Sample ID: 680-230304-11**

Date Collected: 02/08/23 13:30

Matrix: Water

Date Received: 02/09/23 10:01

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	2.8		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 15:47	1
Magnesium	19		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 15:47	1
Sodium	26		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 15:47	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 (SM 2320B-2011)	95		5.0	5.0	mg/L			02/14/23 23:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	95		5.0	5.0	mg/L			02/14/23 23:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	<5.0		5.0	5.0	mg/L			02/14/23 23:47	1

# QC Sample Results

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

Job ID: 680-230304-3

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

**Lab Sample ID: MB 680-762796/1-A**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762796**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Potassium	<0.044		0.50	0.044	mg/L		02/10/23 05:10	02/10/23 14:34	1
Magnesium	<0.023		0.50	0.023	mg/L		02/10/23 05:10	02/10/23 14:34	1
Sodium	<0.20		0.50	0.20	mg/L		02/10/23 05:10	02/10/23 14:34	1

**Lab Sample ID: LCS 680-762796/2-A**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762796**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	5.01	5.20		mg/L		104	80 - 120
Sodium	5.05	5.22		mg/L		103	80 - 120

**Lab Sample ID: 752-2580-A-5-E MS**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762796**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	0.20	J	5.01	5.50		mg/L		106	75 - 125
Sodium	1.2		5.05	6.51		mg/L		105	75 - 125

**Lab Sample ID: 752-2580-A-5-F MSD**  
**Matrix: Water**  
**Analysis Batch: 762951**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 762796**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Magnesium	0.20	J	5.01	5.33		mg/L		102	75 - 125	3	20
Sodium	1.2		5.05	6.30		mg/L		101	75 - 125	3	20

## Method: 2320B-2011 - Alkalinity, Total

**Lab Sample ID: MB 680-763528/4**  
**Matrix: Water**  
**Analysis Batch: 763528**

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/14/23 17:57	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/14/23 17:57	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/14/23 17:57	1

**Lab Sample ID: LCS 680-763528/6**  
**Matrix: Water**  
**Analysis Batch: 763528**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

# QC Sample Results

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

Job ID: 680-230304-3

## Method: 2320B-2011 - Alkalinity, Total (Continued)

**Lab Sample ID: LCSD 680-763528/31**  
**Matrix: Water**  
**Analysis Batch: 763528**

**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 Alkalinity as CaCO3	250	254		mg/L		101	90 - 112	2	30

**Lab Sample ID: 680-230302-B-16 DU**  
**Matrix: Water**  
**Analysis Batch: 763528**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	60		57.1		mg/L		6	30
Bicarbonate Alkalinity as CaCO3	60		57.1		mg/L		6	30
Carbonate Alkalinity as CaCO3	<5.0		<5.0		mg/L		NC	30

**Lab Sample ID: MB 680-763529/4**  
**Matrix: Water**  
**Analysis Batch: 763529**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/14/23 23:21	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/14/23 23:21	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/14/23 23:21	1

**Lab Sample ID: LCS 680-763529/6**  
**Matrix: Water**  
**Analysis Batch: 763529**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	250	248		mg/L		99	90 - 112

**Lab Sample ID: LCSD 680-763529/31**  
**Matrix: Water**  
**Analysis Batch: 763529**

**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 Alkalinity as CaCO3	250	254		mg/L		101	90 - 112	2	30

**Lab Sample ID: 680-230304-11 DU**  
**Matrix: Water**  
**Analysis Batch: 763529**

**Client Sample ID: MCI-MGWC-8**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	95		94.9		mg/L		0	30
Bicarbonate Alkalinity as CaCO3	95		94.9		mg/L		0	30
Carbonate Alkalinity as CaCO3	<5.0		<5.0		mg/L		NC	30

# QC Association Summary

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

Job ID: 680-230304-3

## Metals

### Prep Batch: 762796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total Recoverable	Water	3005A	
680-230304-2	MCI-MGWA-11	Total Recoverable	Water	3005A	
680-230304-3	MCI-MGWA-5	Total Recoverable	Water	3005A	
680-230304-4	MCI-MGWA-6	Total Recoverable	Water	3005A	
680-230304-5	MCI-MGWA-6A	Total Recoverable	Water	3005A	
680-230304-6	MCI-MGWC-3	Total Recoverable	Water	3005A	
680-230304-7	MCI-MGWC-12	Total Recoverable	Water	3005A	
680-230304-8	MCI-MGWC-1	Total Recoverable	Water	3005A	
680-230304-9	MCI-MGWC-2	Total Recoverable	Water	3005A	
680-230304-10	MCI-MGWC-7	Total Recoverable	Water	3005A	
680-230304-11	MCI-MGWC-8	Total Recoverable	Water	3005A	
MB 680-762796/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-762796/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
752-2580-A-5-E MS	Matrix Spike	Total Recoverable	Water	3005A	
752-2580-A-5-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Analysis Batch: 762951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total Recoverable	Water	6020B	762796
680-230304-2	MCI-MGWA-11	Total Recoverable	Water	6020B	762796
680-230304-3	MCI-MGWA-5	Total Recoverable	Water	6020B	762796
680-230304-4	MCI-MGWA-6	Total Recoverable	Water	6020B	762796
680-230304-5	MCI-MGWA-6A	Total Recoverable	Water	6020B	762796
680-230304-6	MCI-MGWC-3	Total Recoverable	Water	6020B	762796
680-230304-7	MCI-MGWC-12	Total Recoverable	Water	6020B	762796
680-230304-8	MCI-MGWC-1	Total Recoverable	Water	6020B	762796
680-230304-9	MCI-MGWC-2	Total Recoverable	Water	6020B	762796
680-230304-10	MCI-MGWC-7	Total Recoverable	Water	6020B	762796
680-230304-11	MCI-MGWC-8	Total Recoverable	Water	6020B	762796
MB 680-762796/1-A	Method Blank	Total Recoverable	Water	6020B	762796
LCS 680-762796/2-A	Lab Control Sample	Total Recoverable	Water	6020B	762796
752-2580-A-5-E MS	Matrix Spike	Total Recoverable	Water	6020B	762796
752-2580-A-5-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	762796

## General Chemistry

### Analysis Batch: 763528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-1	MCI-MGWA-10	Total/NA	Water	2320B-2011	
680-230304-2	MCI-MGWA-11	Total/NA	Water	2320B-2011	
680-230304-3	MCI-MGWA-5	Total/NA	Water	2320B-2011	
680-230304-4	MCI-MGWA-6	Total/NA	Water	2320B-2011	
680-230304-6	MCI-MGWC-3	Total/NA	Water	2320B-2011	
680-230304-7	MCI-MGWC-12	Total/NA	Water	2320B-2011	
680-230304-9	MCI-MGWC-2	Total/NA	Water	2320B-2011	
680-230304-10	MCI-MGWC-7	Total/NA	Water	2320B-2011	
MB 680-763528/4	Method Blank	Total/NA	Water	2320B-2011	
LCS 680-763528/6	Lab Control Sample	Total/NA	Water	2320B-2011	
LCSD 680-763528/31	Lab Control Sample Dup	Total/NA	Water	2320B-2011	
680-230302-B-16 DU	Duplicate	Total/NA	Water	2320B-2011	

# QC Association Summary

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

Job ID: 680-230304-3

## General Chemistry

### Analysis Batch: 763529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230304-5	MCI-MGWA-6A	Total/NA	Water	2320B-2011	
680-230304-8	MCI-MGWC-1	Total/NA	Water	2320B-2011	
680-230304-11	MCI-MGWC-8	Total/NA	Water	2320B-2011	
MB 680-763529/4	Method Blank	Total/NA	Water	2320B-2011	
LCS 680-763529/6	Lab Control Sample	Total/NA	Water	2320B-2011	
LCSD 680-763529/31	Lab Control Sample Dup	Total/NA	Water	2320B-2011	
680-230304-11 DU	MCI-MGWC-8	Total/NA	Water	2320B-2011	

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

# Lab Chronicle

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

Job ID: 680-230304-3

**Client Sample ID: MCI-MGWA-10**

**Lab Sample ID: 680-230304-1**

Date Collected: 02/07/23 10:15

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 14:59	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 20:52	PG	EET SAV
		Instrument ID: MANTECH 2								

**Client Sample ID: MCI-MGWA-11**

**Lab Sample ID: 680-230304-2**

Date Collected: 02/07/23 12:10

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:03	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 21:02	PG	EET SAV
		Instrument ID: MANTECH 2								

**Client Sample ID: MCI-MGWA-5**

**Lab Sample ID: 680-230304-3**

Date Collected: 02/07/23 13:40

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:07	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 21:31	PG	EET SAV
		Instrument ID: MANTECH 2								

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

**Lab Sample ID: 680-230304-4**

Date Collected: 02/07/23 12:05

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:11	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 20:44	PG	EET SAV
		Instrument ID: MANTECH 2								



# Lab Chronicle

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

Job ID: 680-230304-3

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

**Lab Sample ID: 680-230304-5**

Date Collected: 02/07/23 10:40

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:23	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763529	02/15/23 03:01	PG	EET SAV
		Instrument ID: MANTECH 2								

**Client Sample ID: MCI-MGWC-3**

**Lab Sample ID: 680-230304-6**

Date Collected: 02/07/23 14:20

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:27	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 21:21	PG	EET SAV
		Instrument ID: MANTECH 2								

**Client Sample ID: MCI-MGWC-12**

**Lab Sample ID: 680-230304-7**

Date Collected: 02/07/23 15:05

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:31	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 20:34	PG	EET SAV
		Instrument ID: MANTECH 2								

**Client Sample ID: MCI-MGWC-1**

**Lab Sample ID: 680-230304-8**

Date Collected: 02/08/23 10:00

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:35	BWR	EET SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2320B-2011		1			763529	02/15/23 00:07	PG	EET SAV
		Instrument ID: MANTECH 2								

# Lab Chronicle

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

Job ID: 680-230304-3

## Client Sample ID: MCI-MGWC-2

## Lab Sample ID: 680-230304-9

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:39	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 21:11	PG	EET SAV
Instrument ID: MANTECH 2										

## Client Sample ID: MCI-MGWC-7

## Lab Sample ID: 680-230304-10

Date Collected: 02/08/23 11:50

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:43	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Analysis	2320B-2011		1			763528	02/14/23 10:38	PG	EET SAV
Instrument ID: MANTECH 2										

## Client Sample ID: MCI-MGWC-8

## Lab Sample ID: 680-230304-11

Date Collected: 02/08/23 13:30

Matrix: Water

Date Received: 02/09/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	125 mL	762796	02/10/23 05:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			762951	02/10/23 15:47	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Analysis	2320B-2011		1			763529	02/14/23 23:47	PG	EET SAV
Instrument ID: MANTECH 2										

**Laboratory References:**

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: 680-230304-3

## Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	41450	06-30-23
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-23 *
California	State	2939	06-30-22 *
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-30-23
Georgia	State	E87052	06-30-23
Georgia (DW)	State	803	06-30-23
Guam	State	19-007R	04-17-23
Hawaii	State	<cert No.>	06-30-23
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-23
Iowa	State	353	07-01-23
Kentucky (UST)	State	NA	06-30-23
Louisiana (All)	NELAP	30690	06-30-23
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-23
Michigan	State	9925	06-30-23
Mississippi	State	<cert No.>	06-30-23
Nebraska	State	NE-OS-7-04	06-30-23
New Jersey	NELAP	GA769	06-30-23
New Mexico	State	GA00006	06-30-23
New York	NELAP	10842	04-01-23
North Carolina (DW)	State	13701	07-31-23
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-23
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23
Tennessee	State	TN02961	06-30-23
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-23
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-23
Wisconsin	State	999819810	08-31-23

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

# Method Summary

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

Job ID: 680-230304-3

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET SAV
2320B-2011	Alkalinity, Total	SM	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV

**Protocol References:**

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 SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858



# Chain of Custody Record



<b>Client Information</b>		Sampler: <i>A Schmitter</i> ACC	Lab PM: Fuller David	Carrier Tracking No(s):	COC No						
Client Contact: SCS Contacts		Phone: <i>770-594-5998</i>	E-Mail: david.fuller@et.eurofinsus.com		Page: <i>1 of 1</i>						
Company: GA Power		<b>Analysis Requested</b>			Job #:						
Address: 241 Ralph McGill Blvd SE					Due Date Requested:		Total Number of Containers				
City: Atlanta					TAT Requested (days): <i>Standard</i>						
State, Zip: GA, 30308					Lab Project #: <b>68027747</b>						
Phone: 404-506-7116(Tel)		PO #:	Preservation Codes:		Other:						
Email:		Project #:	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)								
SCS Contacts / ACC Contacts		SSOW#:	Task Code: <b>MCI-CCR-ASSMT-2023S1</b>  Special Instructions/Note <b>ALK + 3 Cations (Report Separately)</b>								
Project Name: Plant McIntosh - Ash Pond 1											
Site: Georgia											
Sample Identification	Sample Date (mm/dd/yy)	Sample Time (hhmm)	Sample Type (C=Comp, G=grab)	Matrix (WG=ground water, WS=surface water, WQ=quality control)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Cations Mg Na K	Total Carbonate	Bicarbonate	Alkalinity	Total Number of Containers
Preservation Code:					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D	I			
MCI- <i>MGWA-10</i>	<i>02/07/23</i>	<i>1015</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWA-11</i>	<i>02/07/23</i>	<i>1210</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWA-5</i>	<i>02/07/23</i>	<i>1340</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWA-6</i>	<i>02/07/23</i>	<i>1205</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWA-6A</i>	<i>02/07/23</i>	<i>1040</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWC-3</i>	<i>02/07/23</i>	<i>1420</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWC-12</i>	<i>02/07/23</i>	<i>1505</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWC-1</i>	<i>02/08/23</i>	<i>1000</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWC-2</i>	<i>02/08/23</i>	<i>0955</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWC-7</i>	<i>02/08/23</i>	<i>1150</i>	G	WG	N	N	✓	✓			2
MCI- <i>MGWC-8</i>	<i>02/08/23</i>	<i>1330</i>	G	WG	N	N	✓	✓			2
<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 Additional Cations magnesium, sodium potassium						
Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:						
Relinquished by: <i>[Signature]</i>		Date/Time: <i>2-9-23/0845</i>	Company: <i>ACC</i>		Received by: <i>[Signature]</i>		Date/Time: <i>2-9-23/0845</i>	Company: <i>ACC</i>			
Relinquished by: <i>[Signature]</i>		Date/Time: <i>2-9-23/1000</i>	Company: <i>ACC</i>		Received by: <i>[Signature]</i>		Date/Time: <i>2/9/23 1001</i>	Company:			
Relinquished by:		Date/Time:	Company:		Received by:		Date/Time:	Company:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <i>3.7/3.7 2.6/2.6 2.1/2.1</i>							

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-230304-3

**Login Number: 230304**

**List Source: Eurofins Savannah**

**List Number: 1**

**Creator: Johnson, Corey M**

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	

**LEVEL 2A LABORATORY DATA VALIDATIONS**

**McIntosh Ash Pond 1**

**Semiannual Event**

**February 2023**

## **Georgia Power Company – McIntosh Ash Pond 1**

### **Quality Control Review of Analytical Data – February 2023**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins Environment Testing America, Savannah and St. Louis for groundwater samples collected at McIntosh Ash Pond 1 (AP1) between February 7, 2023 and February 8, 2023. 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.

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 (US EPA Method 6020B), Mercury in Liquid Wastes (US EPA Method 7470A), Determination of Inorganic Anions (US EPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (US EPA Method 9315), and Radium-228 (US EPA Method 9320).

Data were reviewed in accordance with the US EPA Region 4 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. If 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 lithium from MCI-MGWC-2 (680-230304-9), mercury from MCI-MGWC-8 (680-230304-11), and combined radium from MCI-MGWC-8 (680-230304-11) as described in the qualifications section below.

**Accuracy:** Laboratory goals for accuracy were met.

**Detection Limits:** Project goals for detection limits were met. Certain samples were diluted due to the concentration of target or non-target analyte interferences. Dilutions do not require qualifications based on US EPA guidelines. Reporting limits (RLs) of non-detect compounds are elevated proportional to the dilution when undiluted sample results were not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization.

**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 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.

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 MCI-MGWC-2 (680-230304-9) and MCI-AP1-FD-01 (680-230304-12) were qualified as estimated (J) for lithium as the relative percent difference (RPD) exceeded QC criteria (24.1% above the limit of 20).
- Samples MCI-MGWC-8 (680-230304-11) and MCI-AP1-FD-02 (680-230304-13) were qualified as estimated (J) for mercury as the RPD exceeded QC criteria (36.4% above the limit of 20).
- Samples MCI-MGWC-8 (680-230304-11) and MCI-AP1-FD-02 (680-230304-13) were qualified as estimated (J) for combined radium as the RPD exceeded QC criteria (34.2% above the limit of 20).
- Certain lithium results on work order 680-230304-1 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 within the same order of magnitude as the reporting limit (RL), the new RL was raised to the sample result as part of the qualification process. When the original sample result was well above the RL, the sample result was qualified as estimated (J) as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh AP1 sampled between February 7, 2023 and February 8, 2023 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>US EPA, 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>US EPA, 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  
2023 Semiannual Groundwater Monitoring and Corrective Action Report

TABLE 1  
Georgia Power Company – McIntosh AP1  
Sample Summary Table – February 2023

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)
230304-1	MCI-MGWA-10	02/07/23	680-230304-1	WG		X	X	X	
230304-2	MCI-MGWA-10	02/07/23	680-230304-1	WG					X
230304-1	MCI-MGWA-11	02/07/23	680-230304-2	WG		X	X	X	
230304-2	MCI-MGWA-11	02/07/23	680-230304-2	WG					X
230304-1	MCI-MGWA-5	02/07/23	680-230304-3	WG		X	X	X	
230304-2	MCI-MGWA-5	02/07/23	680-230304-3	WG					X
230304-1	MCI-MGWA-6	02/07/23	680-230304-4	WG		X	X	X	
230304-2	MCI-MGWA-6	02/07/23	680-230304-4	WG					X
230304-1	MCI-MGWA-6A	02/07/23	680-230304-5	WG		X	X	X	
230304-2	MCI-MGWA-6A	02/07/23	680-230304-5	WG					X
230304-1	MCI-MGWC-3	02/07/23	680-230304-6	WG		X	X	X	
230304-2	MCI-MGWC-3	02/07/23	680-230304-6	WG					X
230304-1	MCI-MGWC-12	02/07/23	680-230304-7	WG		X	X	X	
230304-2	MCI-MGWC-12	02/07/23	680-230304-7	WG					X
230304-1	MCI-MGWC-1	02/08/23	680-230304-8	WG		X	X	X	
230304-2	MCI-MGWC-1	02/08/23	680-230304-8	WG					X
230304-1	MCI-MGWC-2	02/08/23	680-230304-9	WG		X	X	X	
230304-2	MCI-MGWC-2	02/08/23	680-230304-9	WG					X
230304-2	MCI-MGWC-7	02/08/23	680-230304-10	WG		X	X	X	
230304-1	MCI-MGWC-7	02/08/23	680-230304-10	WG					X
230304-1	MCI-MGWC-8	02/08/23	680-230304-11	WG		X	X	X	
230304-2	MCI-MGWC-8	02/08/23	680-230304-11	WG					X
230304-1	MCI-AP1-FD-01	02/08/23	680-230304-12	WG	FD (MCI-MGWC-2)	X	X	X	
230304-2	MCI-AP1-FD-01	02/08/23	680-230304-12	WG	FD (MCI-MGWC-2)				X
230304-1	MCI-AP1-FD-02	02/08/23	680-230304-13	WG	FD (MCI-MGWC-8)	X	X	X	
230304-2	MCI-AP1-FD-02	02/08/23	680-230304-13	WG	FD (MCI-MGWC-8)				X

Abbreviations:  
 EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 QC – Quality Control  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids  
 WG – Groundwater  
 WQ – Water Quality Control

Plant McIntosh Ash Pond 1  
 2023 Semiannual Groundwater Monitoring and Corrective Action Report

TABLE 1 (continued)

Georgia Power Company – McIntosh AP1

Sample Summary Table – February 2023

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)
230304-1	MCI-AP1-FB-01	02/07/23	680-230304-14	WQ	FB	X	X	X	
230304-2	MCI-AP1-FB-01	02/07/23	680-230304-14	WQ	FB				X
230304-1	MCI-AP1-FB-02	02/08/23	680-230304-15	WQ	FB	X	X	X	
230304-2	MCI-AP1-FB-02	02/08/23	680-230304-15	WQ	FB				X
230304-1	MCI-AP1-EB-03	02/07/23	680-230304-16	WQ	EB	X	X	X	
230304-2	MCI-AP1-EB-03	02/07/23	680-230304-16	WQ	EB				X
230304-1	MCI-AP1-EB-04	02/08/23	680-230304-17	WQ	EB	X	X	X	
230304-2	MCI-AP1-EB-04	02/08/23	680-230304-17	WQ	EB				X

- Abbreviations:  
 EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 QC – Quality Control  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids  
 WG – Groundwater  
 WQ – Water Quality Control

Plant McIntosh Ash Pond 1  
 2023 Semiannual Groundwater Monitoring and Corrective Action Report

TABLE 2  
 Georgia Power Company – McIntosh AP1  
 Qualifier Summary Table – February 2023

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
230304-1	MCI-MGWA-10	Lithium	0.0081		ND	Blank detection
230304-1	MCI-MGWA-11	Lithium			J	Blank detection
230304-1	MCI-MGWA-5	Lithium			J	Blank detection
230304-1	MCI-MGWC-3	Lithium			J	Blank detection
230304-1	MCI-MGWC-12	Lithium			J	Blank detection
230304-1	MCI-MGWC-1	Lithium			J	Blank detection
230304-1	MCI-MGWC-2	Lithium	0.0065		ND	Blank detection
230304-1	MCI-MGWC-7	Lithium			J	Blank detection
230304-1	MCI-MGWC-8	Lithium			J	Blank detection
230304-1	MCI-AP1-FD-01	Lithium	0.0051		ND	Blank detection
230304-1	MCI-AP1-FD-02	Lithium			J	Blank detection
230304-1	MCI-MGWC-2	Lithium			J	RPD exceeds field goal
230304-1	MCI-AP1-FD-01	Lithium			J	RPD exceeds field goal
230304-1	MCI-MGWC-8	Mercury			J	RPD exceeds field goal
230304-1	MCI-AP1-FD-02	Mercury			J	RPD exceeds field goal
230304-2	MCI-MGWC-8	Combined Radium			J	RPD exceeds field goal
230304-2	MCI-AP1-FD-02	Combined Radium			J	RPD exceeds field goal

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

**LEVEL 2A LABORATORY DATA VALIDATIONS**

**McIntosh Ash Pond 1**

**Major Ions Event**

**February 2023**

## **Georgia Power Company – McIntosh Ash Pond 1**

### **Quality Control Review of Analytical Data – February 2023**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins Environment Testing America, Savannah for groundwater samples collected at McIntosh Ash Pond 1 (AP1) between February 7, 2023 and February 8, 2023. 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.

The samples were analyzed for major ion constituents. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B) and Alkalinity in Water (Standard Methods 2320B).

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 (laboratory duplicate recoveries and 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. If 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 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.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh AP1 sampled between February 7, 2023 and February 8, 2023 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>US EPA, 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>US EPA, 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  
 2023 Semiannual Groundwater Monitoring and Corrective Action Report

TABLE 1  
 Georgia Power Company – McIntosh AP1  
 Sample Summary Table – February 2023

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses	
						Metals (6020B)	Alkalinity (SM 2320B)
230304-3	MCI-MGWA-10	02/07/23	680-230304-1	WG		X	X
230304-3	MCI-MGWA-11	02/07/23	680-230304-2	WG		X	X
230304-3	MCI-MGWA-5	02/07/23	680-230304-3	WG		X	X
230304-3	MCI-MGWA-6	02/07/23	680-230304-4	WG		X	X
230304-3	MCI-MGWA-6A	02/07/23	680-230304-5	WG		X	X
230304-3	MCI-MGWC-3	02/07/23	680-230304-6	WG		X	X
230304-3	MCI-MGWC-12	02/07/23	680-230304-7	WG		X	X
230304-3	MCI-MGWC-1	02/08/23	680-230304-8	WG		X	X
230304-3	MCI-MGWC-2	02/08/23	680-230304-9	WG		X	X
230304-3	MCI-MGWC-7	02/08/23	680-230304-10	WG		X	X
230304-3	MCI-MGWC-8	02/08/23	680-230304-11	WG		X	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

# Low-Flow Test Report:

Test Date / Time: 2/7/2023 1:10:16 PM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<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: 25.54 ft</b>	<b>Pump Type: Peristaltic Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 58 ft</b> <b>Estimated Total Volume Pumped: 5.2 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 175 ml/min</b> <b>Final Draw Down: 15 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843285</b>
---	--	--

## Test Notes:

Sample time 1340. 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	
2/7/2023 1:10 PM	00:00	8.00 pH	22.54 °C	124.48 µS/cm	5.56 mg/L	1.55 NTU	65.3 mV	25.54 ft	175.00 ml/min
2/7/2023 1:15 PM	05:00	7.95 pH	22.15 °C	126.80 µS/cm	5.54 mg/L	1.83 NTU	63.1 mV	26.80 ft	175.00 ml/min
2/7/2023 1:20 PM	10:00	7.88 pH	22.07 °C	127.72 µS/cm	5.30 mg/L	1.94 NTU	63.7 mV	26.80 ft	175.00 ml/min
2/7/2023 1:25 PM	15:00	7.87 pH	22.00 °C	128.54 µS/cm	5.17 mg/L	1.95 NTU	67.1 mV	26.80 ft	175.00 ml/min
2/7/2023 1:30 PM	20:00	7.85 pH	22.03 °C	128.69 µS/cm	4.74 mg/L	1.47 NTU	67.4 mV	26.80 ft	175.00 ml/min
2/7/2023 1:35 PM	25:00	7.85 pH	21.94 °C	128.80 µS/cm	4.68 mg/L	1.60 NTU	67.5 mV	26.80 ft	175.00 ml/min
2/7/2023 1:40 PM	30:00	7.85 pH	21.94 °C	128.61 µS/cm	4.42 mg/L	1.87 NTU	67.5 mV	26.80 ft	175.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

# Low-Flow Test Report:

Test Date / Time: 2/7/2023 11:35:04 AM

Project: Plant McIntosh AP-1

Operator Name: D. Johnson

<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: 32.14 ft</b> <b>Total Depth: 42.14 ft</b> <b>Initial Depth to Water: 24.91 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: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 2.16 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884186</b>
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## Test Notes:

Sample time 1205. Sunny, 65 degrees F.

## 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	
2/7/2023 11:35 AM	00:00	7.27 pH	28.36 °C	0.45 µS/cm	2.38 mg/L	4.24 NTU	11.2 mV	24.91 ft	150.00 ml/min
2/7/2023 11:40 AM	05:00	7.16 pH	23.06 °C	0.50 µS/cm	0.37 mg/L	4.11 NTU	-17.1 mV	25.09 ft	150.00 ml/min
2/7/2023 11:45 AM	10:00	7.15 pH	22.47 °C	0.50 µS/cm	0.24 mg/L	3.90 NTU	-23.6 mV	25.09 ft	150.00 ml/min
2/7/2023 11:50 AM	15:00	7.15 pH	22.32 °C	0.50 µS/cm	0.23 mg/L	3.77 NTU	-2.2 mV	25.09 ft	150.00 ml/min
2/7/2023 11:55 AM	20:00	7.15 pH	22.24 °C	0.50 µS/cm	0.20 mg/L	3.58 NTU	-12.9 mV	25.09 ft	150.00 ml/min
2/7/2023 12:00 PM	25:00	7.14 pH	22.29 °C	0.50 µS/cm	0.19 mg/L	2.98 NTU	-13.3 mV	25.09 ft	150.00 ml/min
2/7/2023 12:05 PM	30:00	7.13 pH	22.45 °C	0.50 µS/cm	0.16 mg/L	3.00 NTU	2.0 mV	25.09 ft	150.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/7/2023 9:45:05 AM

Project: Plant McIntosh AP-1

Operator Name: D. Johnson

<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: 32.44 ft</b> <b>Total Depth: 42.44 ft</b> <b>Initial Depth to Water: 23.34 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: 8.25 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 12 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884186</b>
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## Test Notes:

Sample time-1040. Sunny.

## 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	
2/7/2023 9:45 AM	00:00	6.79 pH	22.10 °C	0.46 µS/cm	2.43 mg/L	10.10 NTU	-44.8 mV	23.34 ft	150.00 ml/min
2/7/2023 9:50 AM	05:00	7.14 pH	20.34 °C	0.48 µS/cm	0.49 mg/L	13.10 NTU	-77.0 mV	24.34 ft	150.00 ml/min
2/7/2023 9:55 AM	10:00	7.21 pH	20.66 °C	0.48 µS/cm	0.45 mg/L	14.20 NTU	-107.0 mV	24.34 ft	150.00 ml/min
2/7/2023 10:00 AM	15:00	7.23 pH	20.88 °C	0.48 µS/cm	0.39 mg/L	12.60 NTU	-77.1 mV	24.34 ft	150.00 ml/min
2/7/2023 10:05 AM	20:00	7.23 pH	20.99 °C	0.48 µS/cm	0.34 mg/L	11.00 NTU	-105.9 mV	24.34 ft	150.00 ml/min
2/7/2023 10:10 AM	25:00	7.24 pH	21.21 °C	0.48 µS/cm	0.31 mg/L	9.96 NTU	-76.9 mV	24.34 ft	150.00 ml/min
2/7/2023 10:15 AM	30:00	7.24 pH	21.36 °C	0.48 µS/cm	0.26 mg/L	9.54 NTU	-106.1 mV	24.34 ft	150.00 ml/min
2/7/2023 10:20 AM	35:00	7.24 pH	21.41 °C	0.48 µS/cm	0.26 mg/L	8.54 NTU	-78.8 mV	24.34 ft	150.00 ml/min
2/7/2023 10:25 AM	40:00	7.24 pH	21.51 °C	0.48 µS/cm	0.21 mg/L	6.67 NTU	-107.9 mV	24.34 ft	150.00 ml/min
2/7/2023 10:30 AM	45:00	7.24 pH	21.64 °C	0.48 µS/cm	0.18 mg/L	5.60 NTU	-79.2 mV	24.34 ft	150.00 ml/min
2/7/2023 10:35 AM	50:00	7.24 pH	21.66 °C	0.48 µS/cm	0.15 mg/L	4.22 NTU	-108.3 mV	24.34 ft	150.00 ml/min
2/7/2023 10:40 AM	55:00	7.24 pH	21.82 °C	0.48 µS/cm	0.14 mg/L	3.94 NTU	-108.0 mV	24.34 ft	150.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/7/2023 9:35:03 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<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: 18.56 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 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 35 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843285</b>
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## Test Notes:

Sample time 1015. Sunny 60s.

## 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	
2/7/2023 9:35 AM	00:00	6.69 pH	17.85 °C	41.78 µS/cm	6.21 mg/L	1.86 NTU	168.8 mV	18.56 ft	100.00 ml/min
2/7/2023 9:40 AM	05:00	5.78 pH	19.58 °C	36.05 µS/cm	3.77 mg/L	1.17 NTU	138.5 mV	19.60 ft	100.00 ml/min
2/7/2023 9:45 AM	10:00	5.46 pH	20.29 °C	31.04 µS/cm	2.61 mg/L	0.47 NTU	137.0 mV	20.00 ft	100.00 ml/min
2/7/2023 9:50 AM	15:00	5.62 pH	20.35 °C	34.16 µS/cm	3.22 mg/L	0.42 NTU	127.9 mV	20.50 ft	100.00 ml/min
2/7/2023 9:55 AM	20:00	5.58 pH	20.50 °C	33.57 µS/cm	3.00 mg/L	0.52 NTU	124.6 mV	20.80 ft	100.00 ml/min
2/7/2023 10:00 AM	25:00	5.54 pH	20.62 °C	32.95 µS/cm	2.88 mg/L	0.83 NTU	123.0 mV	21.40 ft	100.00 ml/min
2/7/2023 10:05 AM	30:00	5.45 pH	20.67 °C	31.90 µS/cm	2.61 mg/L	0.74 NTU	122.3 mV	21.40 ft	100.00 ml/min
2/7/2023 10:10 AM	35:00	5.44 pH	20.89 °C	32.22 µS/cm	2.51 mg/L	0.69 NTU	120.1 mV	21.50 ft	100.00 ml/min
2/7/2023 10:15 AM	40:00	5.46 pH	20.96 °C	32.58 µS/cm	2.39 mg/L	0.72 NTU	118.5 mV	21.50 ft	100.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/7/2023 11:35:13 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<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: 22.93 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: 6.4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 185 ml/min</b> <b>Final Draw Down: 6 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843285</b>
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## Test Notes:

Sample time 1210. Sunny 60s.

## 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	
2/7/2023 11:35 AM	00:00	7.23 pH	25.36 °C	129.86 µS/cm	0.74 mg/L	0.67 NTU	84.6 mV	22.93 ft	185.00 ml/min
2/7/2023 11:40 AM	05:00	7.63 pH	23.23 °C	137.26 µS/cm	0.39 mg/L	0.56 NTU	75.7 mV	23.40 ft	185.00 ml/min
2/7/2023 11:45 AM	10:00	7.74 pH	23.05 °C	137.68 µS/cm	0.28 mg/L	0.47 NTU	71.4 mV	23.40 ft	185.00 ml/min
2/7/2023 11:50 AM	15:00	7.76 pH	23.05 °C	137.53 µS/cm	0.20 mg/L	0.58 NTU	67.0 mV	23.40 ft	185.00 ml/min
2/7/2023 11:55 AM	20:00	7.77 pH	23.01 °C	137.40 µS/cm	0.12 mg/L	0.61 NTU	63.7 mV	23.40 ft	185.00 ml/min
2/7/2023 12:00 PM	25:00	7.77 pH	23.01 °C	140.13 µS/cm	0.11 mg/L	0.66 NTU	60.8 mV	23.40 ft	185.00 ml/min
2/7/2023 12:05 PM	30:00	7.73 pH	22.97 °C	146.98 µS/cm	0.09 mg/L	0.75 NTU	-15.5 mV	23.40 ft	185.00 ml/min
2/7/2023 12:10 PM	35:00	7.72 pH	23.11 °C	147.26 µS/cm	0.08 mg/L	0.86 NTU	-29.8 mV	23.40 ft	185.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/8/2023 9:30:26 AM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<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: 40.31 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: 6.7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 225 ml/min</b> <b>Final Draw Down: 17 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843285</b>
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## Test Notes:

Sample time 1000. Sunny 60s. FB-02 here at 1025.

## 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	
2/8/2023 9:30 AM	00:00	7.17 pH	18.51 °C	471.73 µS/cm	0.71 mg/L	11.60 NTU	177.4 mV	40.31 ft	225.00 ml/min
2/8/2023 9:35 AM	05:00	7.23 pH	19.30 °C	465.97 µS/cm	0.41 mg/L	14.10 NTU	149.7 mV	41.70 ft	225.00 ml/min
2/8/2023 9:40 AM	10:00	7.24 pH	19.44 °C	440.43 µS/cm	0.50 mg/L	9.89 NTU	129.9 mV	41.70 ft	225.00 ml/min
2/8/2023 9:45 AM	15:00	7.26 pH	19.56 °C	454.07 µS/cm	0.40 mg/L	9.48 NTU	115.6 mV	41.70 ft	225.00 ml/min
2/8/2023 9:50 AM	20:00	7.26 pH	19.62 °C	456.43 µS/cm	0.37 mg/L	9.02 NTU	102.9 mV	41.70 ft	225.00 ml/min
2/8/2023 9:55 AM	25:00	7.28 pH	19.75 °C	462.81 µS/cm	0.34 mg/L	5.98 NTU	92.1 mV	41.70 ft	225.00 ml/min
2/8/2023 10:00 AM	30:00	7.28 pH	19.88 °C	461.75 µS/cm	0.32 mg/L	3.71 NTU	84.3 mV	41.70 ft	225.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/8/2023 9:25:03 AM

Project: Plant McIntosh AP-1

Operator Name: D. Johnson

<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: 27.9 ft</b> <b>Total Depth: 37.29 ft</b> <b>Initial Depth to Water: 21.81 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 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 14.04 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884186</b>
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## Test Notes:

Sunny, 55 Degrees F. sample time 0955.

## 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	
2/8/2023 9:25 AM	00:00	7.16 pH	17.86 °C	830.83 µS/cm	0.61 mg/L	76.30 NTU	67.9 mV	21.81 ft	200.00 ml/min
2/8/2023 9:30 AM	05:00	7.37 pH	19.24 °C	752.35 µS/cm	0.26 mg/L	72.80 NTU	8.5 mV	21.81 ft	200.00 ml/min
2/8/2023 9:35 AM	10:00	7.41 pH	19.46 °C	754.74 µS/cm	0.20 mg/L	17.30 NTU	11.2 mV	22.98 ft	200.00 ml/min
2/8/2023 9:40 AM	15:00	7.41 pH	19.65 °C	746.43 µS/cm	0.17 mg/L	8.65 NTU	-8.9 mV	22.98 ft	200.00 ml/min
2/8/2023 9:45 AM	20:00	7.42 pH	19.86 °C	751.15 µS/cm	0.15 mg/L	3.99 NTU	5.3 mV	22.98 ft	200.00 ml/min
2/8/2023 9:50 AM	25:00	7.44 pH	19.88 °C	745.48 µS/cm	0.13 mg/L	3.53 NTU	-15.6 mV	22.98 ft	200.00 ml/min
2/8/2023 9:55 AM	30:00	7.44 pH	20.08 °C	752.45 µS/cm	0.12 mg/L	2.89 NTU	2.9 mV	22.98 ft	200.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/7/2023 1:50:03 PM

Project: Plant McIntosh AP-1

Operator Name: D. Johnson

<b>Location Name: MGWC-3</b> <b>Well Diameter: 2 ft</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28 ft</b> <b>Total Depth: 38.98 ft</b> <b>Initial Depth to Water: 21.32 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: 5.25 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 175 ml/min</b> <b>Final Draw Down: 4.2 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884186</b>
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## Test Notes:

Sunny, 65 degrees F. Sample time 1420

## 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	
2/7/2023 1:50 PM	00:00	7.09 pH	22.24 °C	0.62 µS/cm	1.20 mg/L	3.20 NTU	59.5 mV	21.32 ft	175.00 ml/min
2/7/2023 1:55 PM	05:00	7.04 pH	20.56 °C	0.63 µS/cm	0.24 mg/L	2.37 NTU	75.4 mV	21.67 ft	175.00 ml/min
2/7/2023 2:00 PM	10:00	7.03 pH	20.34 °C	0.63 µS/cm	0.18 mg/L	2.05 NTU	74.9 mV	21.67 ft	175.00 ml/min
2/7/2023 2:05 PM	15:00	7.02 pH	20.26 °C	0.63 µS/cm	0.15 mg/L	1.59 NTU	59.2 mV	21.67 ft	175.00 ml/min
2/7/2023 2:10 PM	20:00	7.02 pH	20.37 °C	0.63 µS/cm	0.13 mg/L	1.77 NTU	69.0 mV	21.67 ft	175.00 ml/min
2/7/2023 2:15 PM	25:00	7.01 pH	20.22 °C	0.63 µS/cm	0.12 mg/L	1.52 NTU	55.9 mV	21.67 ft	175.00 ml/min
2/7/2023 2:20 PM	30:00	7.01 pH	20.16 °C	0.63 µS/cm	0.12 mg/L	1.36 NTU	63.2 mV	21.67 ft	175.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/8/2023 11:19:05 AM

Project: Plant McIntosh AP-1

Operator Name: D. Johnson

<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: 24.65 ft</b>	<b>Pump Type: Peri Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 38 ft</b> <b>Estimated Total Volume Pumped: 3.6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 120 ml/min</b> <b>Final Draw Down: 4.56 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884186</b>
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## Test Notes:

Sunny, 67 degrees F. Sample time 1150

## 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	
2/8/2023 11:19 AM	00:00	7.57 pH	23.13 °C	600.30 µS/cm	0.95 mg/L	4.53 NTU	-68.6 mV	24.65 ft	120.00 ml/min
2/8/2023 11:24 AM	05:00	7.56 pH	22.86 °C	608.51 µS/cm	0.43 mg/L	6.57 NTU	-74.5 mV	25.03 ft	120.00 ml/min
2/8/2023 11:29 AM	10:00	7.56 pH	23.07 °C	607.18 µS/cm	0.30 mg/L	7.45 NTU	-74.7 mV	25.03 ft	120.00 ml/min
2/8/2023 11:34 AM	15:00	7.56 pH	22.99 °C	608.15 µS/cm	0.23 mg/L	4.95 NTU	-104.3 mV	25.03 ft	120.00 ml/min
2/8/2023 11:39 AM	20:00	7.52 pH	22.86 °C	608.61 µS/cm	0.20 mg/L	4.48 NTU	-64.2 mV	25.03 ft	120.00 ml/min
2/8/2023 11:44 AM	25:00	7.46 pH	23.34 °C	603.69 µS/cm	0.19 mg/L	3.83 NTU	-88.3 mV	25.03 ft	120.00 ml/min
2/8/2023 11:49 AM	30:00	7.43 pH	23.17 °C	601.10 µS/cm	0.17 mg/L	3.98 NTU	-53.4 mV	25.03 ft	120.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/8/2023 1:00:15 PM

Project: Plant McIntosh AP-1

Operator Name: A. Schnittker

<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: 34.98 ft</b>	<b>Pump Type: Portable Bladder Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 47 ft</b> <b>Estimated Total Volume Pumped: 6.7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 225 ml/min</b> <b>Final Draw Down: 4 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843285</b>
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## Test Notes:

Sample time 1330. Sunny 70s. FD-02 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	
2/8/2023 1:00 PM	00:00	6.81 pH	26.96 °C	481.17 µS/cm	1.79 mg/L	3.78 NTU	-49.5 mV	34.98 ft	225.00 ml/min
2/8/2023 1:05 PM	05:00	7.28 pH	23.73 °C	565.03 µS/cm	0.49 mg/L	3.33 NTU	-23.9 mV	35.20 ft	225.00 ml/min
2/8/2023 1:10 PM	10:00	7.18 pH	22.78 °C	560.90 µS/cm	0.26 mg/L	3.24 NTU	-22.1 mV	35.30 ft	225.00 ml/min
2/8/2023 1:15 PM	15:00	6.96 pH	22.48 °C	542.51 µS/cm	0.17 mg/L	3.13 NTU	-6.5 mV	35.30 ft	225.00 ml/min
2/8/2023 1:20 PM	20:00	6.83 pH	22.38 °C	534.51 µS/cm	0.15 mg/L	1.06 NTU	-8.1 mV	35.30 ft	225.00 ml/min
2/8/2023 1:25 PM	25:00	6.77 pH	22.25 °C	534.95 µS/cm	0.13 mg/L	1.10 NTU	-6.5 mV	35.30 ft	225.00 ml/min
2/8/2023 1:30 PM	30:00	6.76 pH	22.16 °C	536.42 µS/cm	0.11 mg/L	0.88 NTU	-5.7 mV	35.30 ft	225.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/7/2023 2:35:14 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: 42.9 ft</b> <b>Total Depth: 52.9 ft</b> <b>Initial Depth to Water: 28.57 ft</b>	<b>Pump Type: Peristaltic Pump</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 47 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: 9 in</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843285</b>
--	---	--

## Test Notes:

Sample time 15:05. 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	
2/7/2023 2:35 PM	00:00	7.06 pH	20.91 °C	146.11 µS/cm	0.28 mg/L	1.12 NTU	61.9 mV	28.57 ft	150.00 ml/min
2/7/2023 2:40 PM	05:00	6.99 pH	20.38 °C	151.81 µS/cm	0.19 mg/L	1.09 NTU	53.6 mV	29.30 ft	150.00 ml/min
2/7/2023 2:45 PM	10:00	6.97 pH	20.33 °C	151.44 µS/cm	0.15 mg/L	1.11 NTU	51.0 mV	29.30 ft	150.00 ml/min
2/7/2023 2:50 PM	15:00	6.96 pH	20.20 °C	151.94 µS/cm	0.12 mg/L	1.18 NTU	49.1 mV	29.30 ft	150.00 ml/min
2/7/2023 2:55 PM	20:00	6.96 pH	20.55 °C	151.11 µS/cm	0.10 mg/L	1.14 NTU	48.2 mV	29.30 ft	150.00 ml/min
2/7/2023 3:00 PM	25:00	6.96 pH	20.42 °C	151.59 µS/cm	0.10 mg/L	1.13 NTU	47.5 mV	29.30 ft	150.00 ml/min
2/7/2023 3:05 PM	30:00	6.95 pH	20.29 °C	151.68 µS/cm	0.10 mg/L	1.08 NTU	40.9 mV	29.30 ft	150.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------



# Daily Instrument Calibration Log

SITE: Plant McIntosh  
 TECHNICIAN: A. Schnittker  
 WATER LEVEL: Solinst  
 WATER LEVEL S/N: 377060

INSTRUMENT S/N: 884186 843285  
 INSTRUMENT TYPE: AquaTroll  
 CAL. SOLUTION/S: ID: pH 4 LOT #: 266870 EXP. DATE: 5/24  
 ID: pH 7 LOT #: 161340 EXP. DATE: 12/23  
 ID: pH 10 LOT #: 266018 EXP. DATE: 7/24  
 ID: Can LOT #: 26F806 EXP. DATE: 6/23  
 ID: ORP LOT #: 21140143 EXP. DATE: 4/23 **Midday pH check**  
 ID: LOT #: EXP. DATE: **Must be less than .10**  
 ID: LOT #: EXP. DATE: **(6.90-7.10 range)**  
 Recalibrate if not within range

Calibration Date: 2/7/23  
 RDO: 100% sat. = 96.31 **Midday pH check**  
 PH: 4.00 = 3.83 7.00 = 7.08 10.00 = 10.17 7.0 = 7.01  
 PH Recal (if needed): 4.00 = NA 7.00 = NA 10.00 = NA 7.0 = NA post recal check  
 CONDUCTIVITY: 1413 = 1628.7  
 ORP (mV) 228 = 255

Calibration Date: 2/8/23  
 RDO: 100% sat. = 107.30 **Midday pH check**  
 PH: 4.00 = 4.10 7.00 = 7.10 10.00 = 10.06 7.0 = 7.03  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: 1413 = 1312  
 ORP (mV) 228 = 236.1

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: A Schmitt

INSTRUMENT S/N: 22090D000108  
INSTRUMENT TYPE: Hach 2100Q  
CAL. SOLUTION: 0 NTU - LOT # NA      EXP. DATE: Fresh DI Water  
10 NTU - LOT # A2264      EXP. DATE: 1/24  
20 NTU - LOT # A2231      EXP. DATE: 12/23

Calibration Date: 2/7/23

Calibration Solution	Instrument Reading	
0.0	<u>0.54</u>	NTU
10.0	<u>10.3</u>	NTU
20.0	<u>20.4</u>	NTU

Calibration Date: 2/8/23

Calibration Solution	Instrument Reading	
0.0	<u>0.27</u>	NTU
10.0	<u>9.00</u>	NTU
20.0	<u>20.3</u>	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



ATLANTIC COAST CONSULTING, INC.

### Daily Instrument Calibration Log

SITE: Plant McIntosh  
 TECHNICIAN: Dever Johnson  
 WATER LEVEL: Scinist  
 WATER LEVEL S/N: 530984

INSTRUMENT S/N: 884186  
 INSTRUMENT TYPE: AquaTroll 530984  
 CAL. SOLUTIONS/ID: ORP LOT #: 22200085 EXP. DATE: 08/23  
 ID: PH 4 LOT #: 21470032 EXP. DATE: 04/23  
 ID: PH 7 LOT #: 22140109 EXP. DATE: 08/23  
 ID: PH 10 LOT #: 22110130 EXP. DATE: 08/23  
 ID: Conduct. LOT #: 261642 EXP. DATE: 09/23 **Midday pH check**  
 ID: LOT #: EXP. DATE: **Must be less than .10**  
 ID: LOT #: EXP. DATE: **(6.90-7.10 range)**  
 Recalibrate if not within range

Calibration Date: 2/7/23  
 RDO: 100% sat. = 95.85% **Midday pH check**  
 PH: 4.00 = 4.01 7.00 = 7.05 10.00 = 10.29 7.0 = 7.05  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: 1.413 = 708.74  
 ORP (mV) 228 = 265.6

Calibration Date: 2/8/23  
 RDO: 100% sat. = 101.01 **Midday pH check**  
 PH: 4.00 = 4.06 7.00 = 7.03 10.00 = 10.09 7.0 = 7.04  
 PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0 = post recal check  
 CONDUCTIVITY: 1.431 = 1.14  
 ORP (mV) 228 = 237.8

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: 1.431 = 1.14  
 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: Daver Johnson

INSTRUMENT'S/N: 2207D000463  
INSTRUMENT TYPE: Hach 2100Q  
CAL. SOLUTION: 0 NTU - LOT # — EXP. DATE: — DI water  
10 NTU - LOT # A2264 EXP. DATE: 1/24  
20 NTU - LOT # A2231 EXP. DATE: 12/23

Calibration Date: 2/7/23

Calibration Solution	Instrument Reading	
0.0	0.21	NTU
10.0	10.1	NTU
20.0	20.3	NTU

Calibration Date: 2/8/23

Calibration Solution	Instrument Reading	
0.0	0.18	NTU
10.0	9.69	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

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

**Plant McIntosh Ash Pond 1  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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: 2/6/2023

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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: 2/6/2023

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

**Plant McIntosh Ash Pond 1  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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  
February 2023 Well Inspection Form**



Permit No.: 051-011D(CCR)

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:

Staff: A. Schnittker  
Date: 2/6/2023

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".



## APPENDIX B

# Statistical Analysis Reports

## APPENDIX B

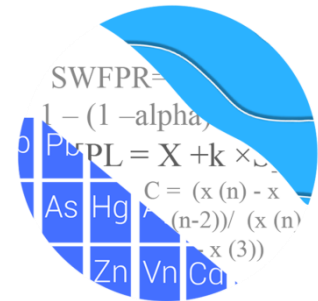
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*Statistical Analysis Reports  
February 2023 Monitoring Event*

# GROUNDWATER STATS CONSULTING

August 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 February 2023

Dear Ms. Hartley,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the February 2023 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 Andrew Collins, Project Manager of 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, 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 2023**

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 additional 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 2023 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The February 2023 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-12
- 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 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
- Chloride: MGWC-8
- Sulfate: MGWC-3, MGWC-7, 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
- 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 2023**

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. Additionally, the August 2022 observation for cobalt in upgradient well MGWA-5 was previously flagged as an outlier in order to construct a conservative interwell tolerance limit. This measurement was re-evaluated during this analysis and remains flagged. 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 additional 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 well using all available data through February 2023 (Figure H).

The Sanitas software was used to calculate the tolerance limits and the confidence intervals, either parametric or nonparametric, depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

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 variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. No statistically significant trends were identified.

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



Andrew Collins  
Project Manager

# Date Ranges

Date: 3/23/2023 8:43 PM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

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Arsenic (mg/L)

MGWA-6 overall:3/29/2018-2/8/2023

# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 3/23/2023 12:09 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

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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

# Interwell Prediction Limits - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/7/2023, 4:02 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	2/8/2023	1.5	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	2/8/2023	1.8	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	2/7/2023	0.63	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	2/8/2023	2.1	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	2/8/2023	3.9	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Chloride (mg/L)	MGWC-1	9.334	n/a	2/8/2023	12	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.334	n/a	2/8/2023	11	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.334	n/a	2/7/2023	11	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.334	n/a	2/8/2023	11	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.334	n/a	2/8/2023	13	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	2/7/2023	0.25	Yes	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	17.96	n/a	2/8/2023	140	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	17.96	n/a	2/8/2023	150	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	17.96	n/a	2/7/2023	120	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	17.96	n/a	2/8/2023	220	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	17.96	n/a	2/8/2023	280	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	346.6	n/a	2/8/2023	400	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	346.6	n/a	2/8/2023	440	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	346.6	n/a	2/7/2023	410	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	346.6	n/a	2/8/2023	370	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	346.6	n/a	2/8/2023	480	Yes	90	181.2	89.53	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 3/7/2023, 4:02 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>2/8/2023</b>	<b>1.5</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-12	0.18	n/a	2/7/2023	0.067J	No	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>0.18</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>1.8</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</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>2/7/2023</b>	<b>0.63</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</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>2/8/2023</b>	<b>2.1</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</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>2/8/2023</b>	<b>3.9</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</b>	<b>NP Inter (NDs) 1 of 2</b>
Calcium (mg/L)	MGWC-1	110	n/a	2/8/2023	110	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	2/7/2023	30	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	2/8/2023	100	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	2/7/2023	110	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-7	110	n/a	2/8/2023	65	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	2/8/2023	110	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-1</b>	<b>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>12</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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	9.334	n/a	2/7/2023	4.2	No	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>11</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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>9.334</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>11</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>11</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>13</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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	2/8/2023	0.11	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MGWC-12</b>	<b>0.19</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>0.25</b>	<b>Yes</b>	<b>94</b>	<b>n/a</b>	<b>n/a</b>	<b>29.79</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002197</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	MGWC-2	0.19	n/a	2/8/2023	0.074J	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	2/7/2023	0.076J	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	2/8/2023	0.14	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-8	0.19	n/a	2/8/2023	0.084J	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	8.12	5	2/8/2023	7.28	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-12	8.12	5	2/7/2023	6.95	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-2	8.12	5	2/8/2023	7.44	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-3	8.12	5	2/7/2023	7.01	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-7	8.12	5	2/8/2023	7.43	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-8	8.12	5	2/8/2023	6.76	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-1</b>	<b>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>140</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-12	17.96	n/a	2/7/2023	4.7	No	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>150</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>17.96</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>120</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>220</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>280</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>400</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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	346.6	n/a	2/7/2023	190	No	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>440</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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>346.6</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>410</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>370</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>480</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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 3/7/2023, 4:13 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>
Boron (mg/L)	MGWA-6 (bg)	-0.01886	-132	-81	Yes	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.272	-138	-81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.09682	143	81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.578	85	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.2156	-111	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.138	-164	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.4011	-37	-30	Yes	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.562	-162	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.5888	-126	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.4104	97	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.1405	-90	-81	Yes	20	35	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.6815	-128	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-2.922	-155	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-23.35	-162	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	6.754	138	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-7	6.288	88	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	42.97	106	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-33.46	-142	-81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	68.04	110	81	Yes	20	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/7/2023, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	56	81	No	20	70	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	14	81	No	20	60	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	14	81	No	20	85	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-0.01886</b>	<b>-132</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>20</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWA-6A (bg)	0	-5	-30	No	10	70	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1362	78	81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>-0.272</b>	<b>-138</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>
Boron (mg/L)	MGWC-3	-0.02947	-29	-81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.09682</b>	<b>143</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>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.578</b>	<b>85</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>
Chloride (mg/L)	MGWA-10 (bg)	0	5	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.02923	-17	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.2156</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>
<b>Chloride (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-1.138</b>	<b>-164</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>Chloride (mg/L)</b>	<b>MGWA-6A (bg)</b>	<b>-0.4011</b>	<b>-37</b>	<b>-30</b>	<b>Yes</b>	<b>10</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	-52	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>-1.562</b>	<b>-162</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>
Chloride (mg/L)	MGWC-3	0	36	81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.5888</b>	<b>-126</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>Chloride (mg/L)</b>	<b>MGWC-8</b>	<b>0.4104</b>	<b>97</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>
Fluoride (mg/L)	MGWA-10 (bg)	0	-37	-87	No	21	66.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	-0.00351	-19	-87	No	21	9.524	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.004835	-65	-87	No	21	19.05	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.005254	-61	-87	No	21	28.57	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0	1	30	No	10	20	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-12	-0.01405	-67	-87	No	21	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.1405</b>	<b>-90</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-11 (bg)	0.187	59	81	No	20	30	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.6815</b>	<b>-128</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-6 (bg)</b>	<b>-2.922</b>	<b>-155</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>
Sulfate (mg/L)	MGWA-6A (bg)	-0.05159	-4	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	2.916	47	81	No	20	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>-23.35</b>	<b>-162</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>MGWC-3</b>	<b>6.754</b>	<b>138</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>MGWC-7</b>	<b>6.288</b>	<b>88</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>MGWC-8</b>	<b>42.97</b>	<b>106</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>
TDS (mg/L)	MGWA-10 (bg)	-2.862	-41	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	2.39	26	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	1.211	17	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	-1.884	-35	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	-3.259	-4	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	10.77	45	81	No	20	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>-33.46</b>	<b>-142</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>
TDS (mg/L)	MGWC-3	7.635	59	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	11.09	65	81	No	20	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>68.04</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>



# Upper Tolerance Limits Summary Table

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/23/2023, 8:49 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	81	91.36	n/a	0.01569	NP Inter(NDs)
Arsenic (mg/L)	0.014	n/a	n/a	n/a	n/a	91	36.26	n/a	0.009394	NP Inter(normality)
Barium (mg/L)	0.13	n/a	n/a	n/a	n/a	99	0	n/a	0.006232	NP Inter(normality)
Beryllium (mg/L)	0.0025	n/a	n/a	n/a	n/a	89	94.38	n/a	0.01041	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	n/a	n/a	99	98.99	n/a	0.006232	NP Inter(NDs)
Chromium (mg/L)	0.0063	n/a	n/a	n/a	n/a	89	71.91	n/a	0.01041	NP Inter(NDs)
Cobalt (mg/L)	0.0025	n/a	n/a	n/a	n/a	98	72.45	n/a	0.00656	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.128	n/a	n/a	n/a	n/a	100	0	No	0.05	Inter
Fluoride (mg/L)	0.19	n/a	n/a	n/a	n/a	94	29.79	n/a	0.008054	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	81	93.83	n/a	0.01569	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	99	30.3	n/a	0.006232	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	89	96.63	n/a	0.01041	NP Inter(NDs)
Molybdenum (mg/L)	0.015	n/a	n/a	n/a	n/a	89	62.92	n/a	0.01041	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	69	91.3	n/a	0.02904	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	89	83.15	n/a	0.01041	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 3/23/2023, 12:13 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>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-7	0.009822	0.007005	0.006	Yes	22	0.002624	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01566	0.007296	0.006	Yes	22	0.007789	0	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	22	0.01965	0	No	0.01	NP (normality)

# Confidence Intervals - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 3/23/2023, 12:13 AM

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	18	0.0003884	88.89	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	18	0.0004007	94.44	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	18	0.0003509	88.89	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002785	0.00192	0.014	No	22	0.0008054	0	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001076	0.0006626	0.014	No	22	0.0003659	27.27	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	22	0.0001986	81.82	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.0017	0.00143	0.014	No	22	0.0003425	4.545	No	0.01	NP (normality)
Arsenic (mg/L)	MGWC-7	0.0008144	0.0005167	0.014	No	22	0.000281	36.36	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00099	0.014	No	22	0.000195	68.18	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	22	0.01606	0	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06494	0.05014	2	No	22	0.01378	0	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.05376	0.04819	2	No	22	0.005188	0	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.1553	0.1413	2	No	22	0.01302	0	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.015	0.01	2	No	22	0.006769	4.545	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.04016	0.03374	2	No	22	0.006254	0	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	20	0.0005188	95	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	20	0.0004897	95	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001658	0.0008074	0.004	No	20	0.0007486	15	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	22	0.0009893	77.27	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.002982	0.001229	0.005	No	22	0.001884	0	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00041	0.005	No	22	0.0006421	90.91	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.001423	0.0005973	0.005	No	22	0.001177	27.27	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.0014	0.1	No	20	0.0003887	90	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.0012	0.1	No	20	0.006042	85	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	20	0.0002907	95	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	20	0.0002236	95	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	20	0.0003768	85	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.0013	0.1	No	20	0.0002984	90	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.00047	0.006	No	22	0.001026	63.64	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	22	0.0005331	90.91	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.003228	0.002348	0.006	No	22	0.0008194	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	22	0.000478	13.64	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>MGWC-7</b>	<b>0.009822</b>	<b>0.007005</b>	<b>0.006</b>	<b>Yes</b>	<b>22</b>	<b>0.002624</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.01566</b>	<b>0.007296</b>	<b>0.006</b>	<b>Yes</b>	<b>22</b>	<b>0.007789</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.71	1.302	5	No	23	0.3905	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7626	0.462	5	No	22	0.28	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.7314	0.4682	5	No	22	0.2451	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.745	1.368	5	No	23	0.3608	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.327	0.9527	5	No	22	0.3488	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	1.952	1.389	5	No	22	0.524	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.2296	0.1406	4	No	21	0.08068	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.251	0.1966	4	No	21	0.05902	0	x^2	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.2	0.075	4	No	21	0.05953	33.33	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-3	0.2	0.079	4	No	21	0.05951	28.57	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3286	0.2146	4	No	21	0.1033	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.1073	0.07066	4	No	21	0.03324	14.29	No	0.01	Param.
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	18	0.0002121	94.44	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	18	0.0002947	83.33	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	18	0.0001838	94.44	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01225	0.01023	0.04	No	22	0.001875	4.545	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.02215	0.01652	0.04	No	22	0.00524	0	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.0066	0.0051	0.04	No	22	0.0042	4.545	No	0.01	NP (normality)
Lithium (mg/L)	MGWC-3	0.01343	0.01149	0.04	No	22	0.001808	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>22</b>	<b>0.01965</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	MGWC-8	0.03721	0.02552	0.04	No	22	0.01089	0	No	0.01	Param.
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.002	No	20	0.00003699	90	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.002	No	20	0.00003435	90	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.002	No	20	0.00002907	95	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.002	No	20	0.00002683	95	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00026	0.00014	0.002	No	21	0.0008595	38.1	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0012	0.1	No	20	0.03016	20	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.002	0.1	No	20	0.00639	70	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	20	0.002569	95	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	20	0.002527	95	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	16	0.001125	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	16	0.001182	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	16	0.001137	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	16	0.00114	93.75	No	0.01	NP (NDs)

# Confidence Intervals - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/23/2023, 12:13 AM

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	16	0.001185	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.00038	0.05	No	16	0.001915	75	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00032	0.002	No	20	0.0003752	75	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	20	0.0002439	90	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	20	0.0001766	95	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	20	0.0002288	90	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.0002436	0.0001385	0.002	No	20	0.0003726	30	In(x)	0.01	Param.

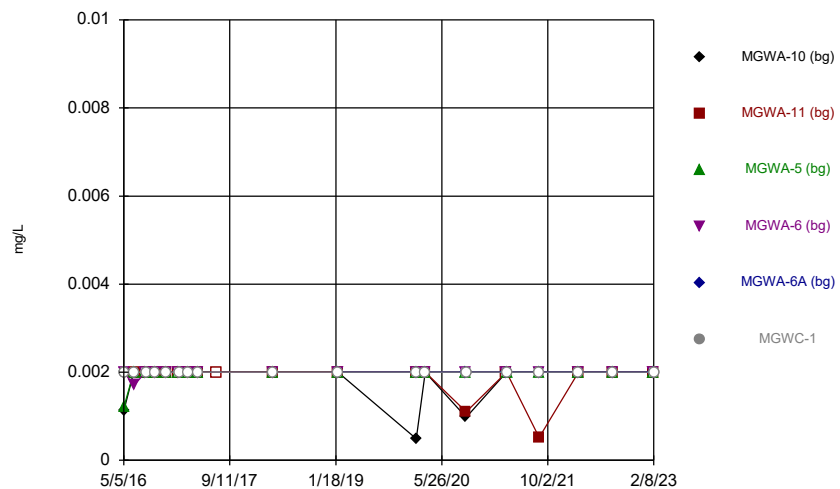
# Appendix IV Trend Tests - All Results (No Significant)

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/23/2023, 12:49 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	MGWA-10 (bg)	0	0	92	No	22	86.36	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	21	92	No	22	95.45	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	18	87	No	21	95.24	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	-34	-92	No	22	40.91	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6A (bg)	0.00003862	4	34	No	11	18.18	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-7	-0.0005723	-79	-92	No	22	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-8	0.003015	88	92	No	22	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-10 (bg)	0.00005878	14	92	No	22	4.545	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0008379	42	92	No	22	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0003427	57	92	No	22	4.545	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6 (bg)	0	5	92	No	22	95.45	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.0001001	-28	-34	No	11	63.64	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWC-7	0	27	92	No	22	0	n/a	n/a	0.01	NP

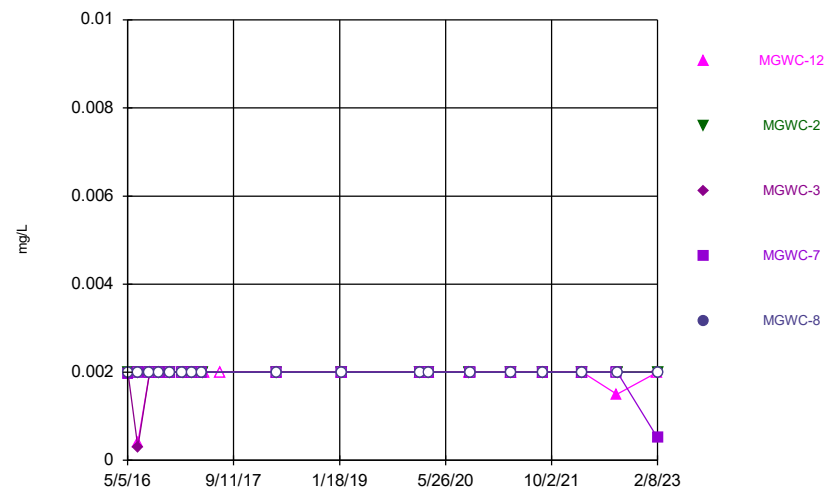
FIGURE A.

### Time Series



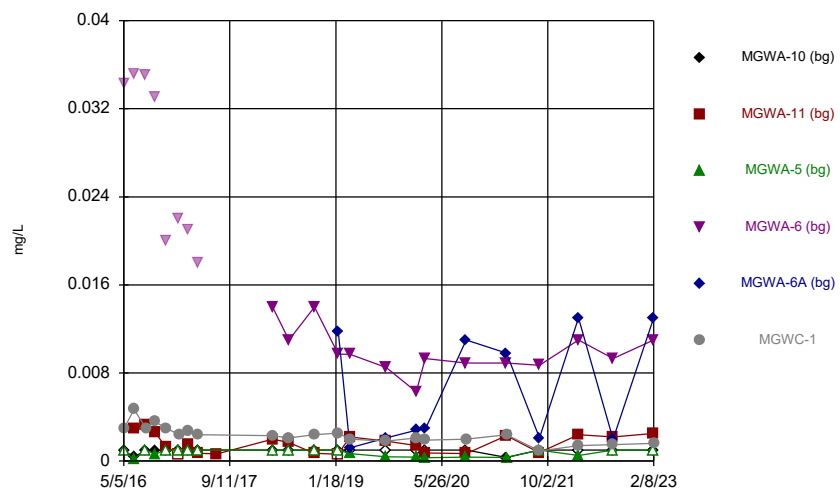
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



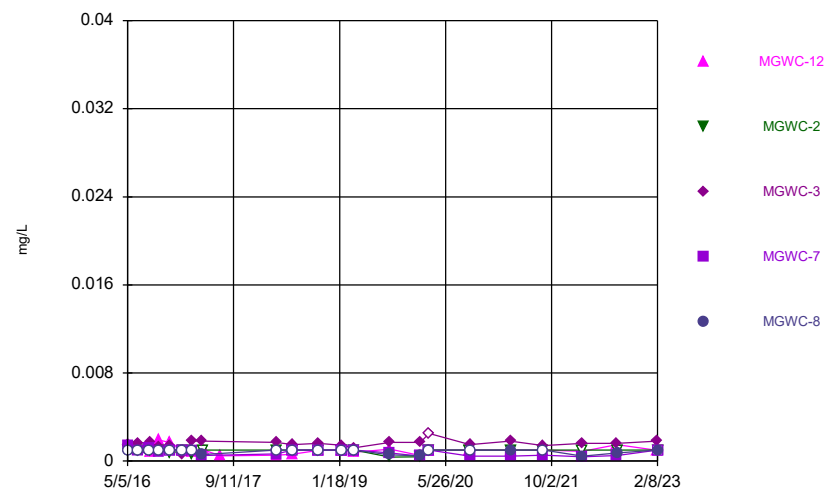
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: Arsenic Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

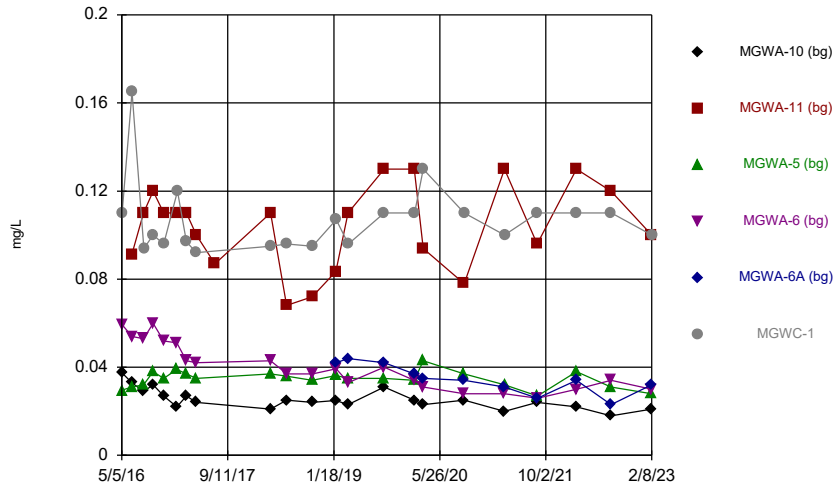
### Time Series



Constituent: Arsenic Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



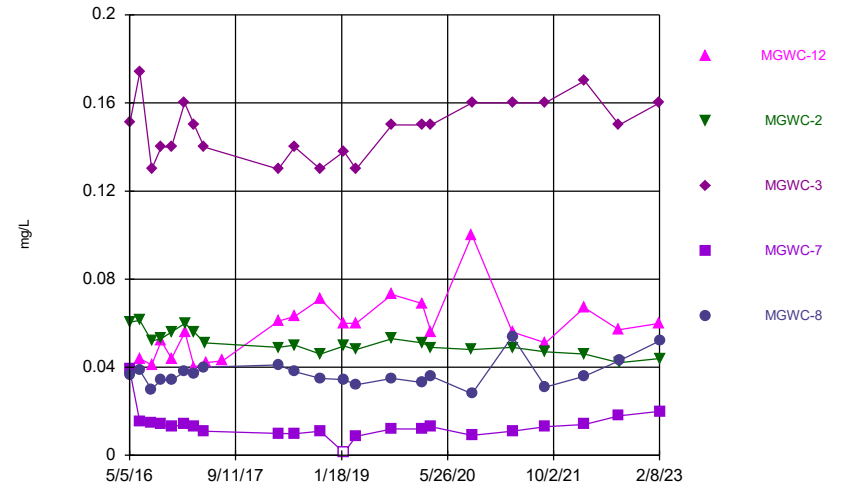
Time Series



Constituent: Barium Analysis Run 3/23/2023 8:44 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

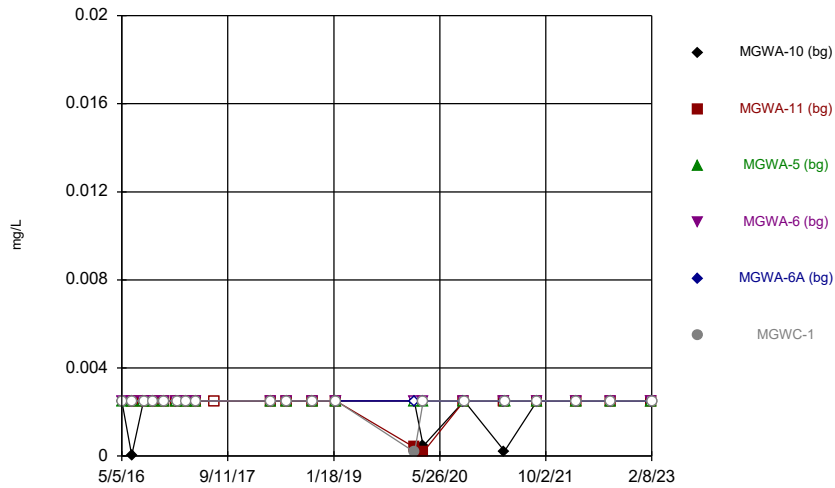
Time Series



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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

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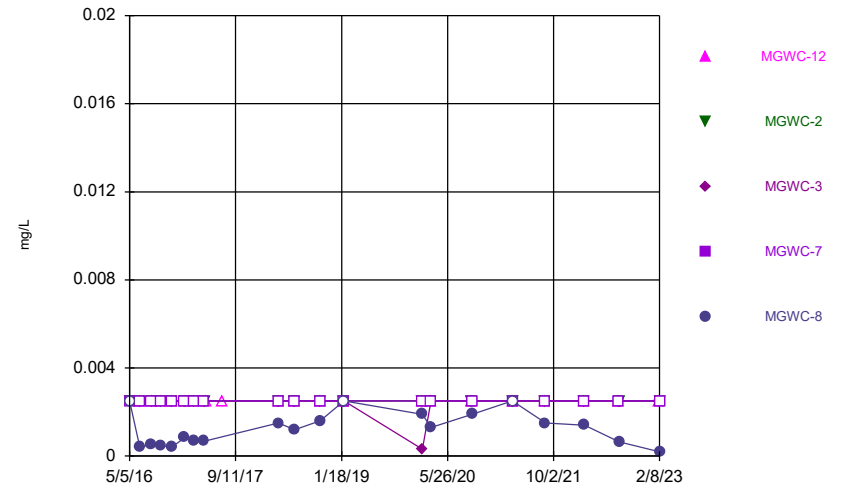
Time Series



Constituent: Beryllium Analysis Run 3/23/2023 8:44 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

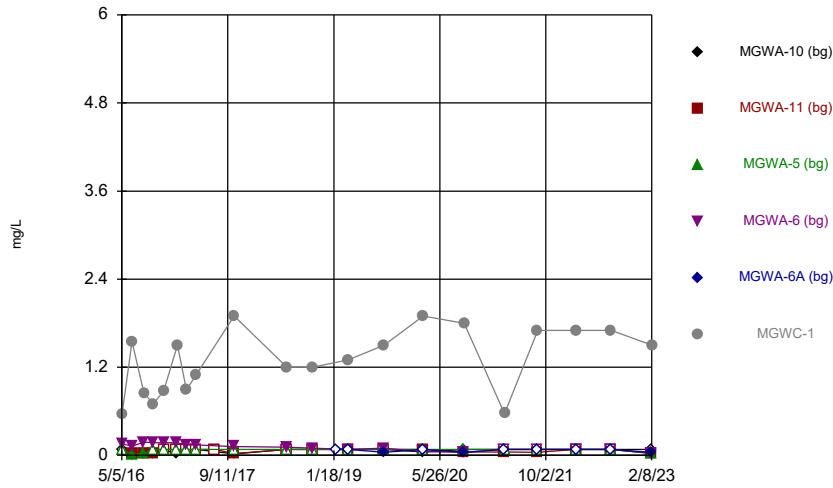
Hollow symbols indicate censored values.

Time Series



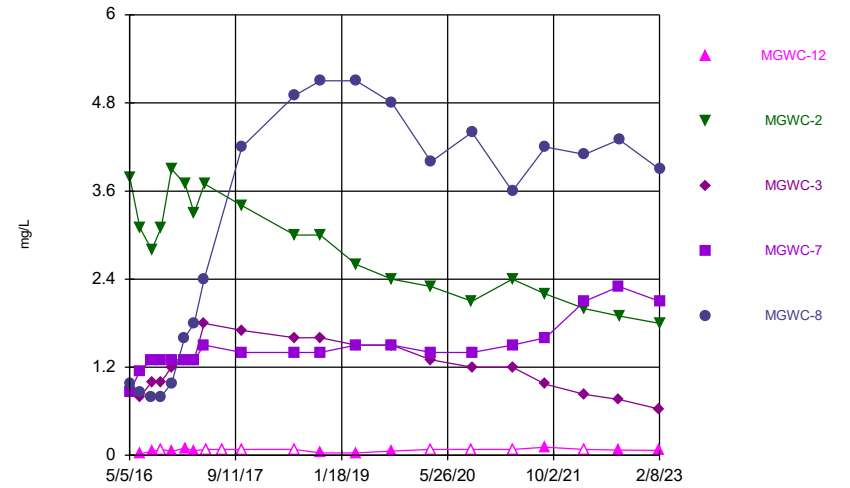
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



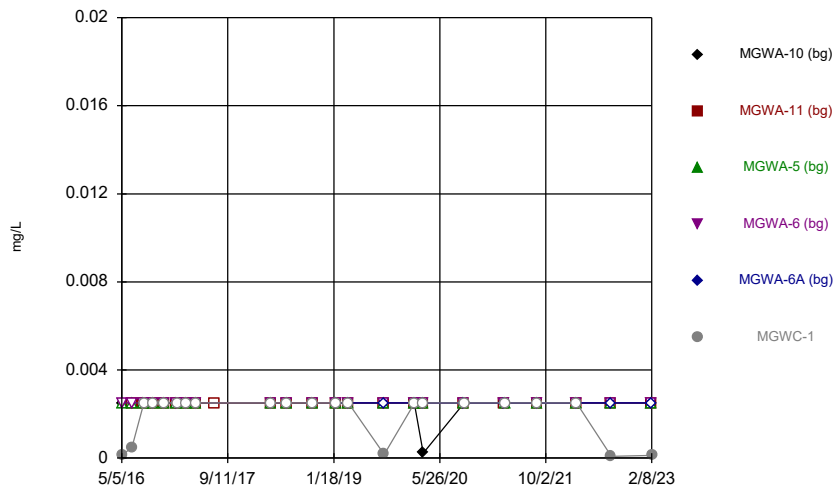
Constituent: Boron Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



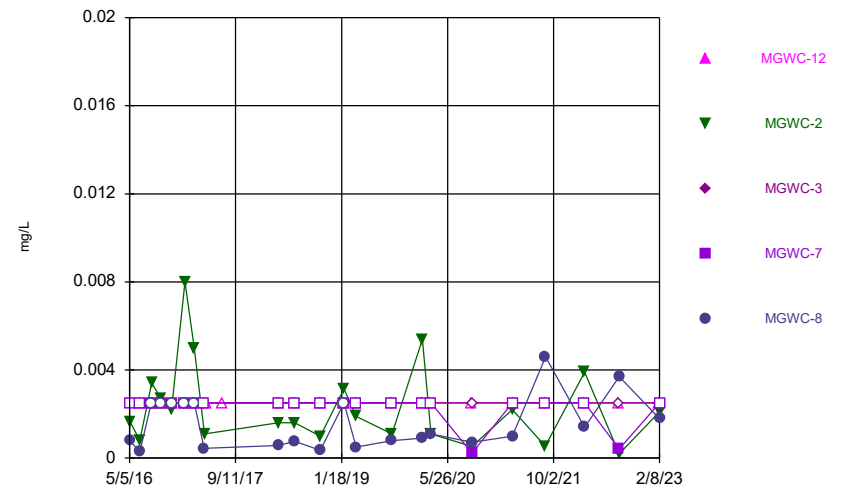
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



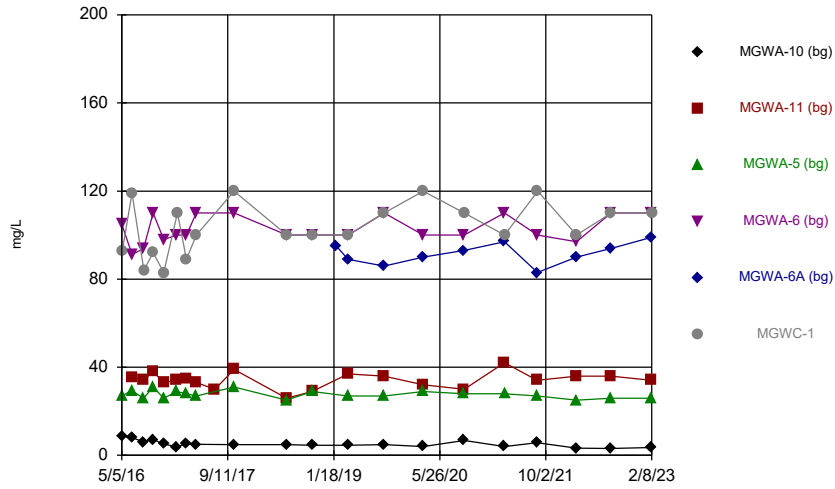
Constituent: Cadmium Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



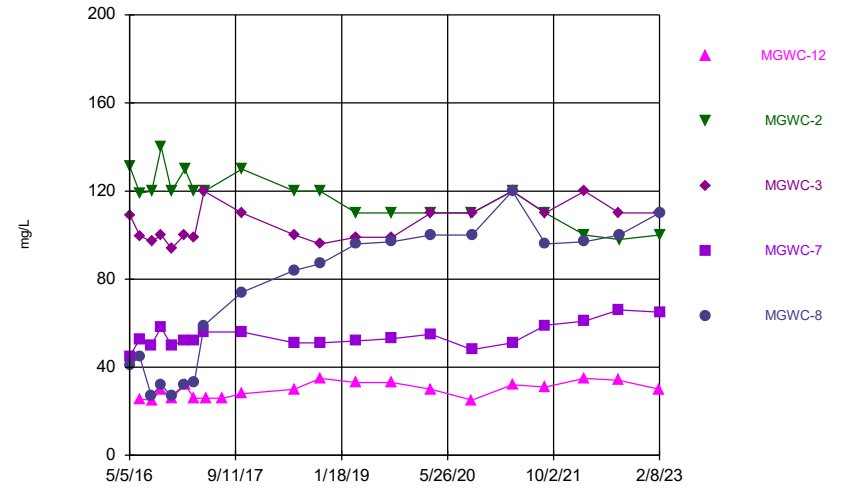
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



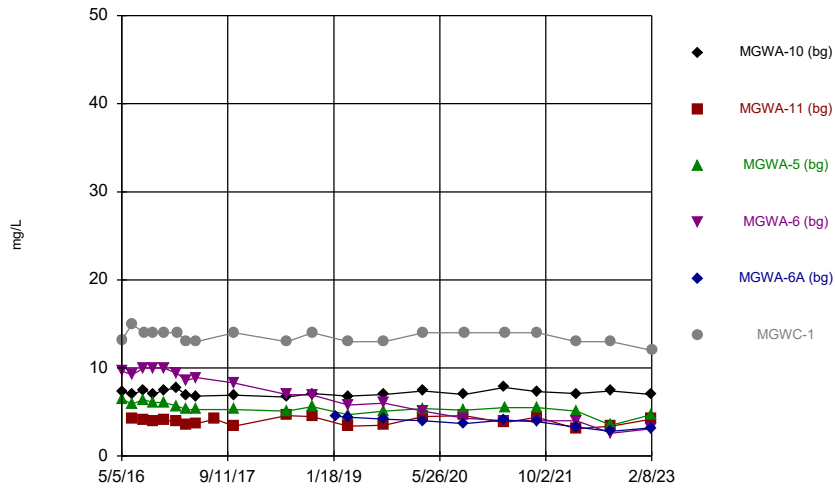
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



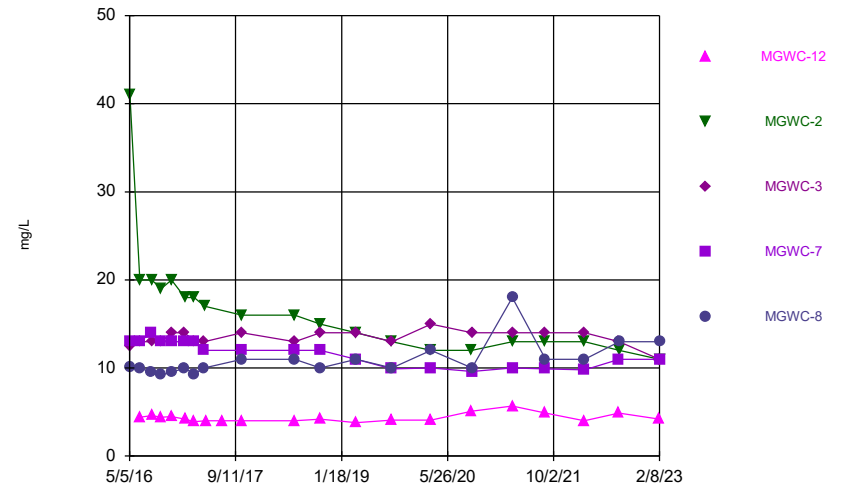
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



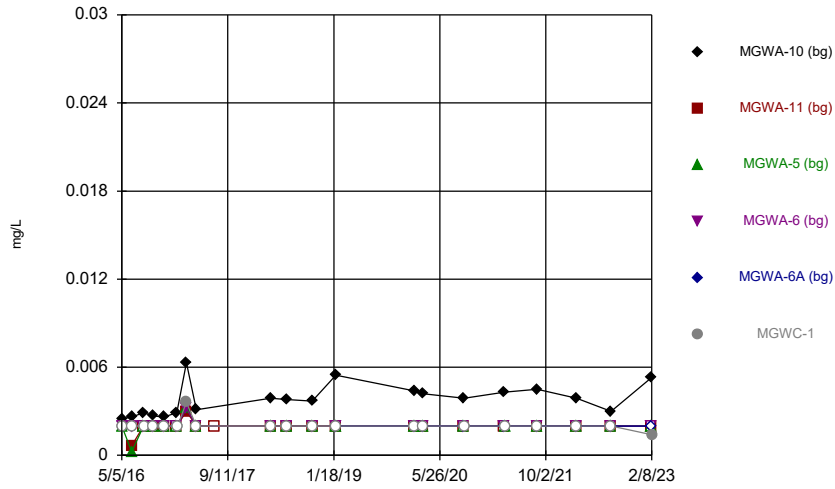
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



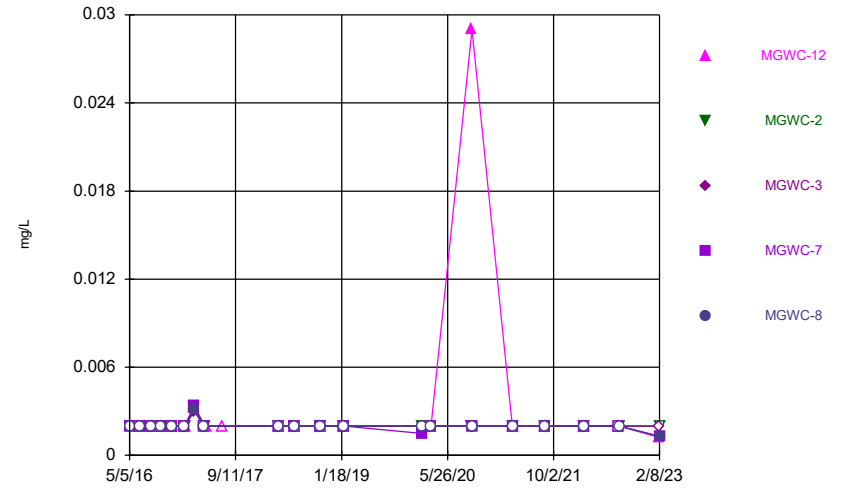
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



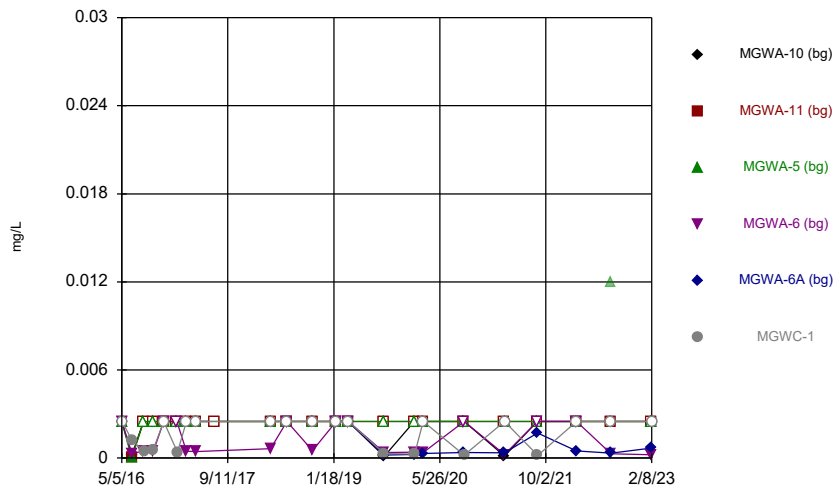
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



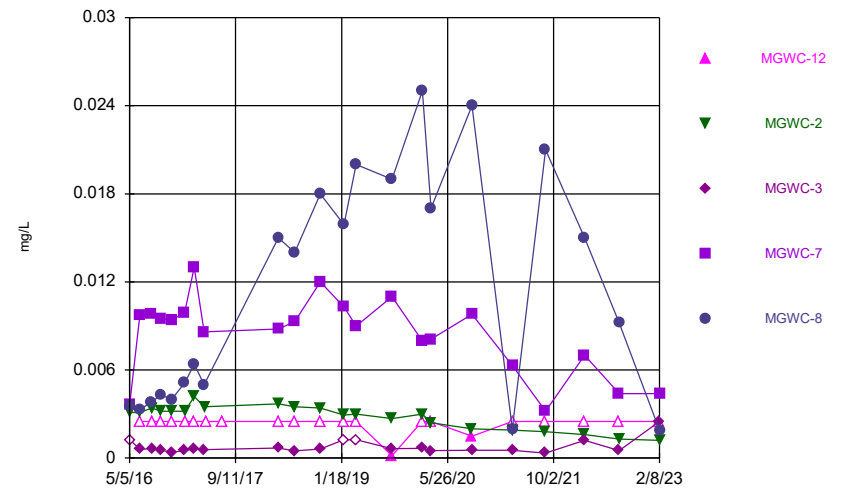
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### Time Series



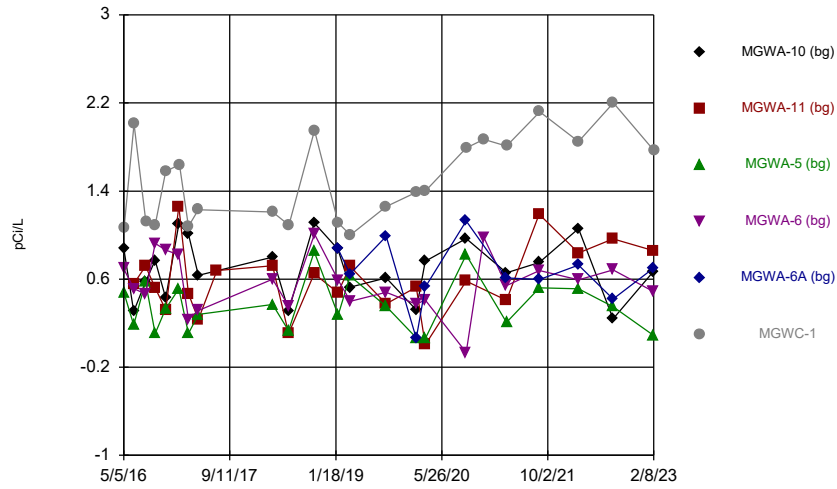
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



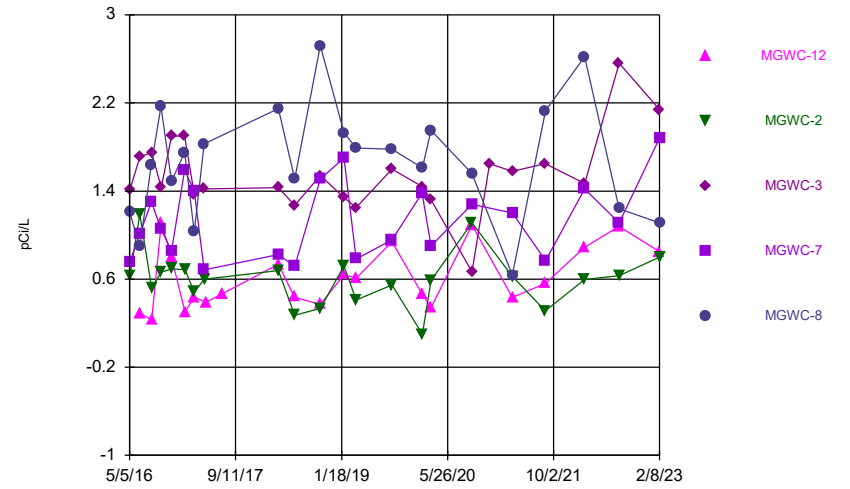
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Time Series



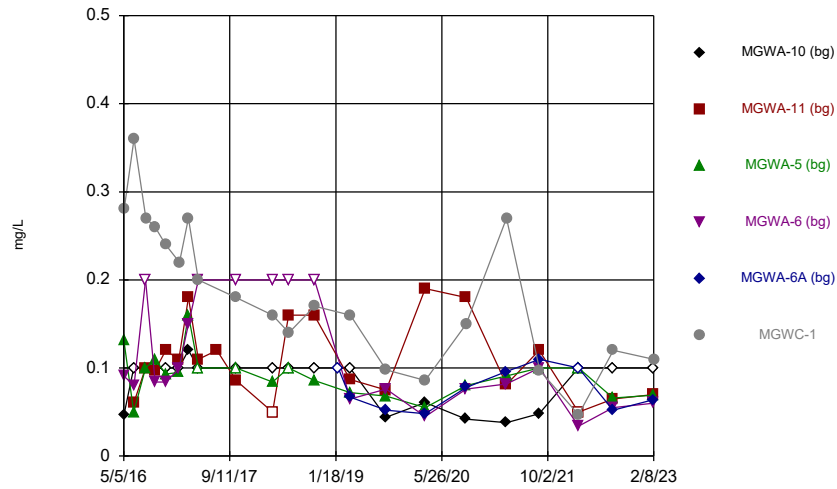
Constituent: Combined Radium 226 + 228 Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



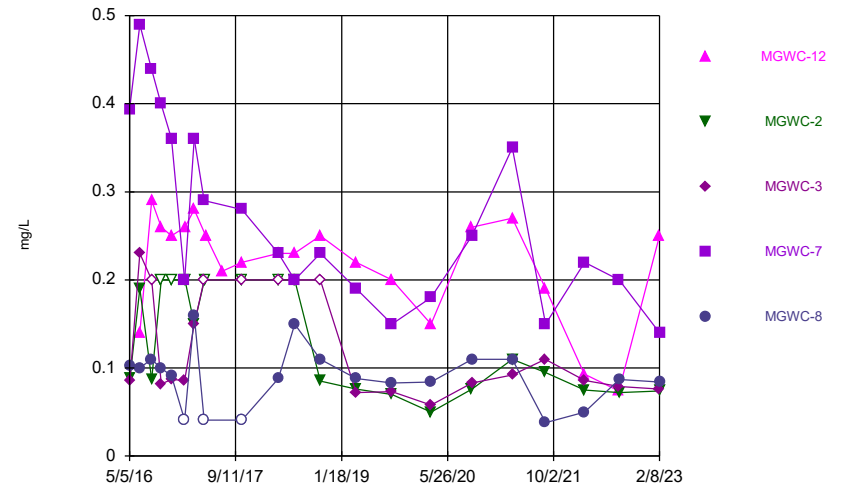
Constituent: Combined Radium 226 + 228 Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



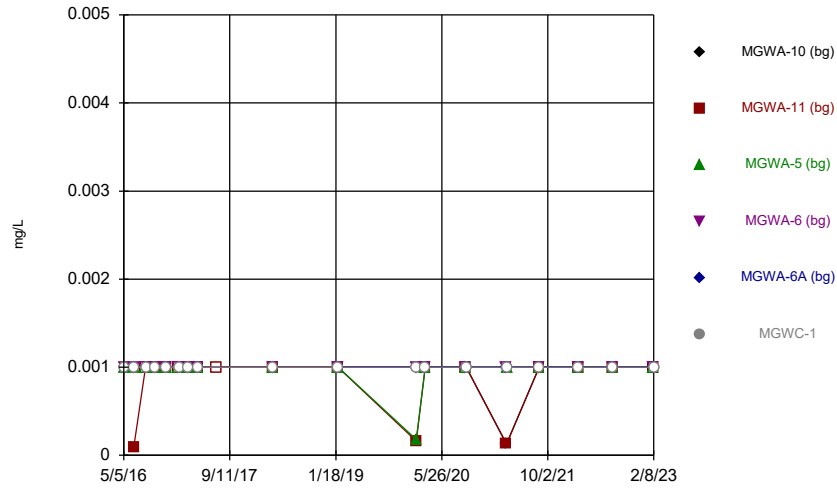
Constituent: Fluoride Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



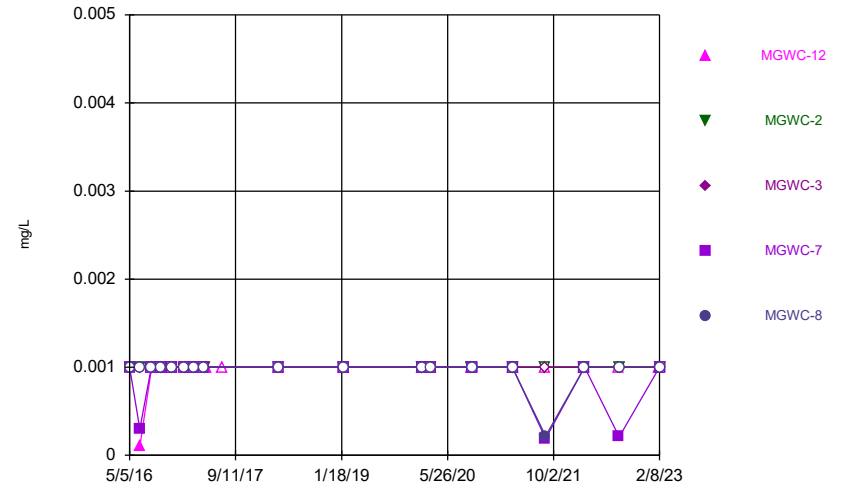
Constituent: Fluoride Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



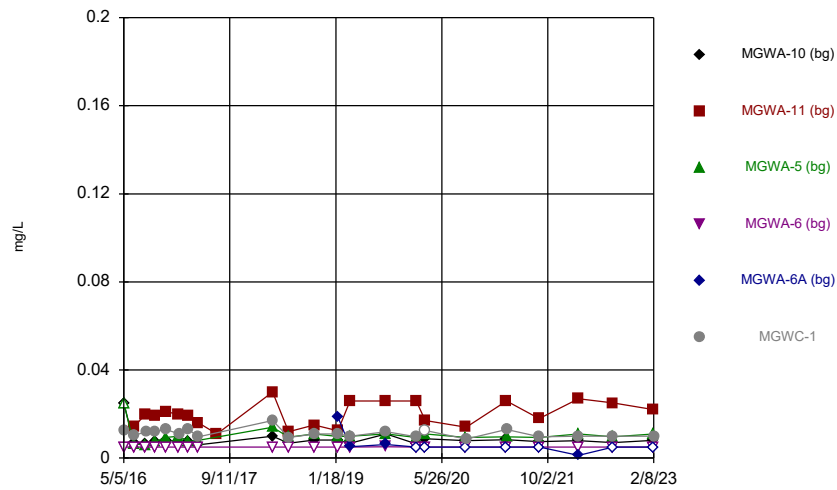
Constituent: Lead Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



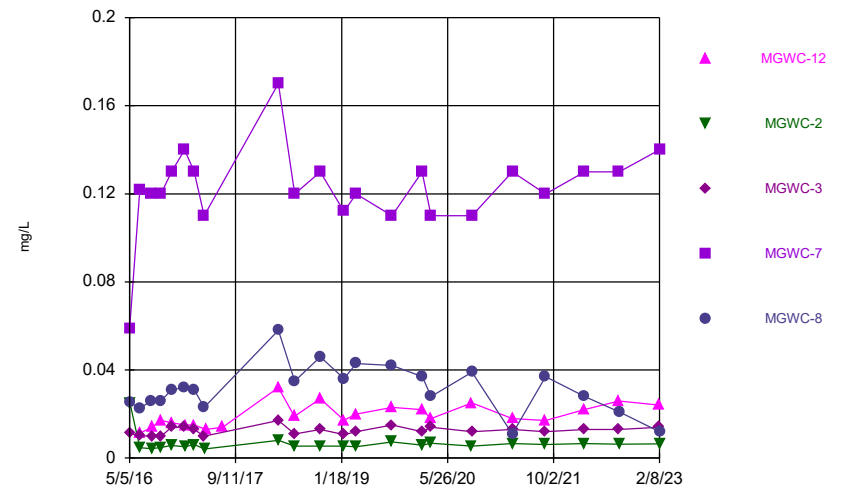
Constituent: Lead Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



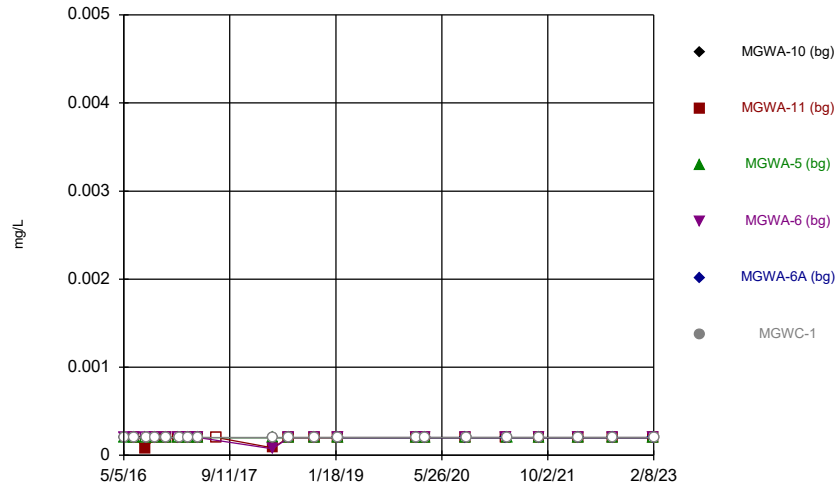
Constituent: Lithium Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



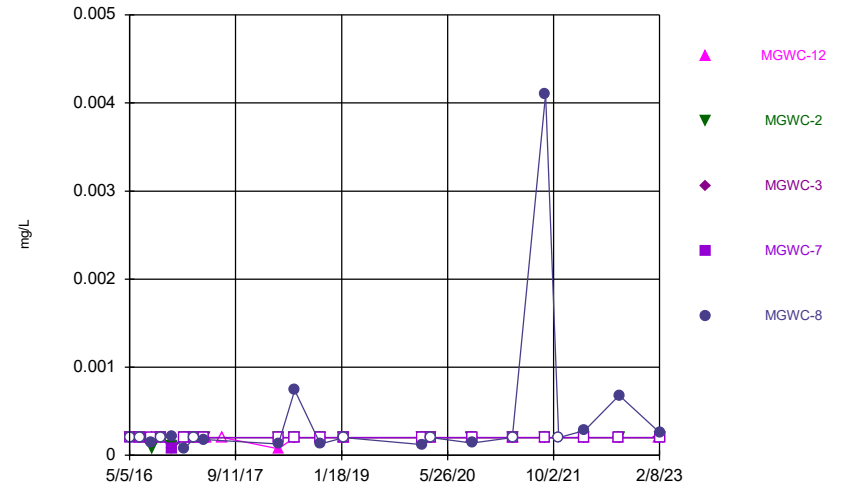
Constituent: Lithium Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



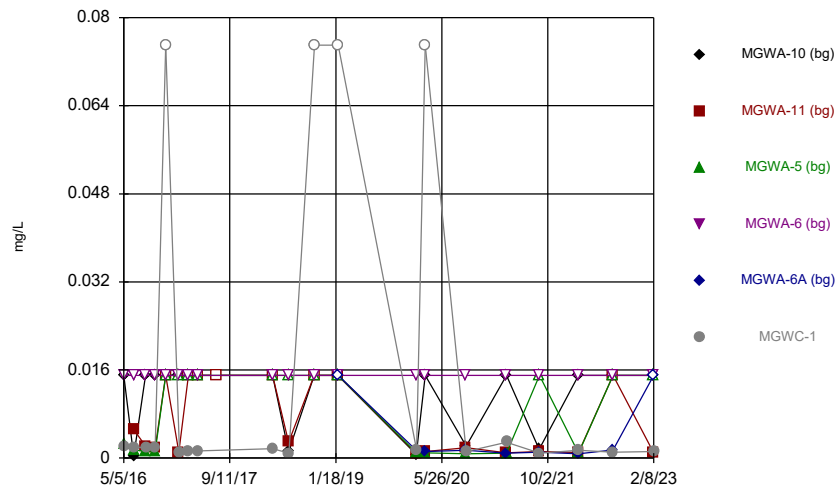
Constituent: Mercury Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



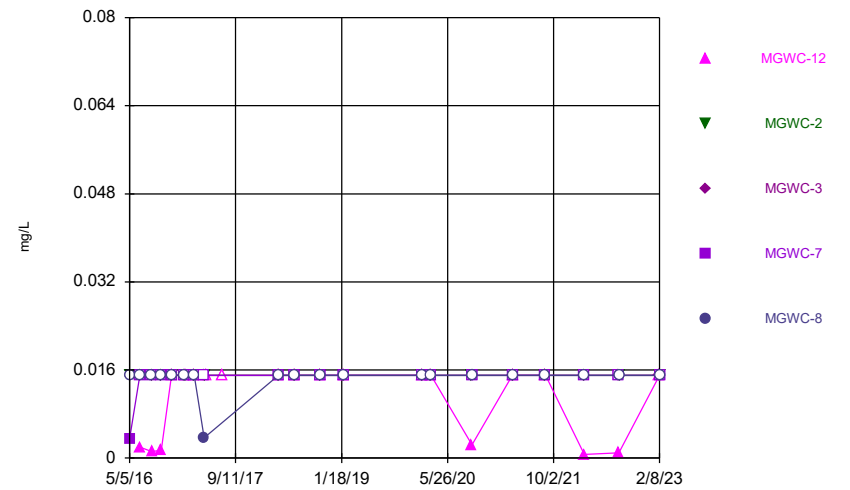
Constituent: Mercury Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



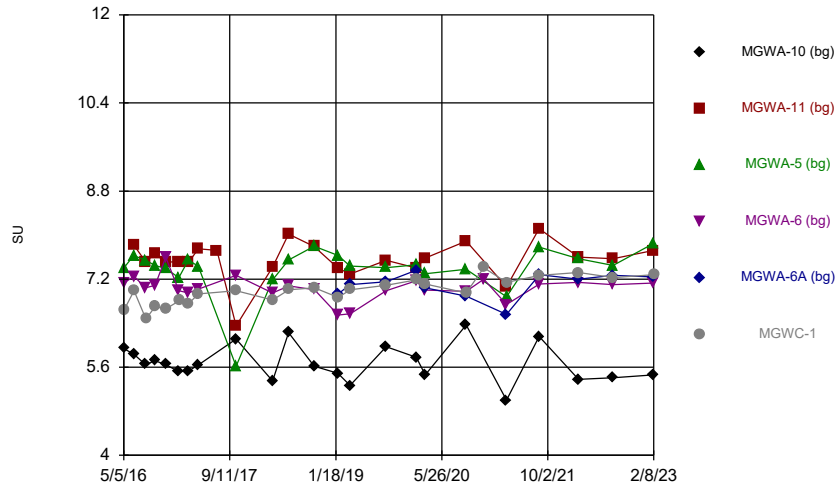
Constituent: Molybdenum Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



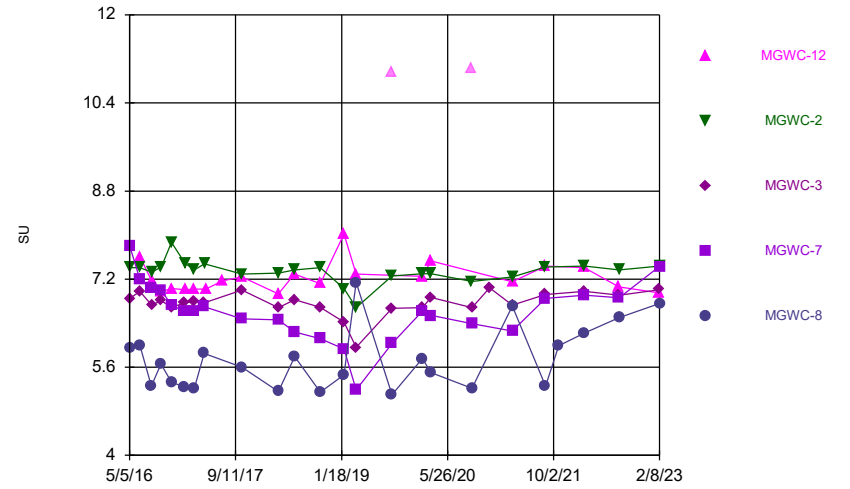
Constituent: Molybdenum Analysis Run 3/23/2023 8:44 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



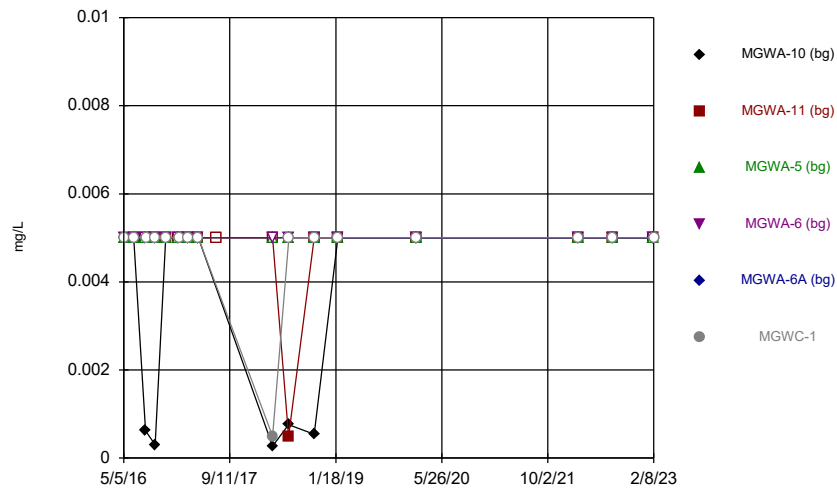
Constituent: pH Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



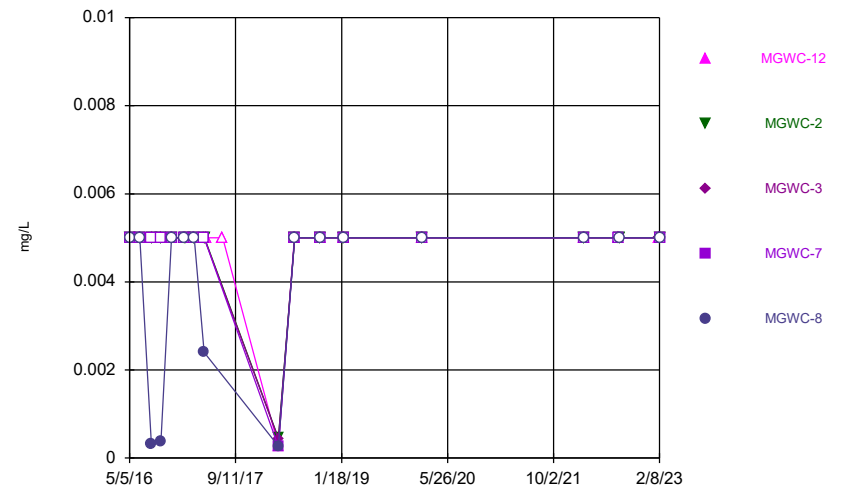
Constituent: pH Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



Constituent: Selenium Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

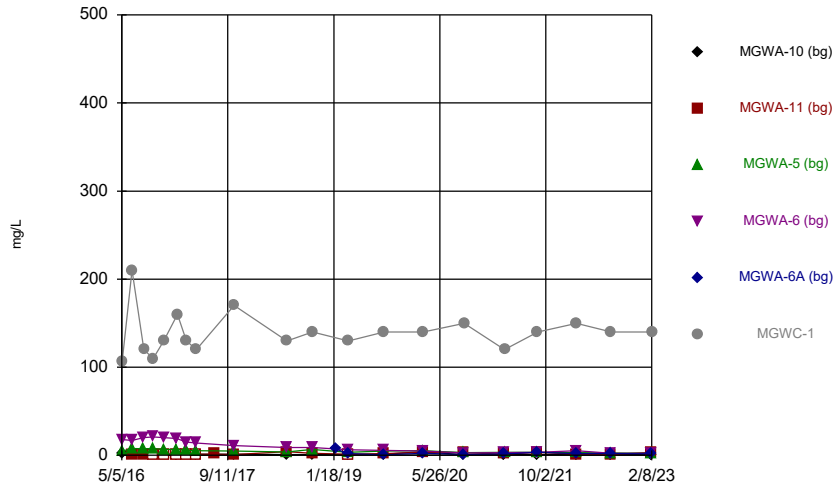
Time Series



Constituent: Selenium Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

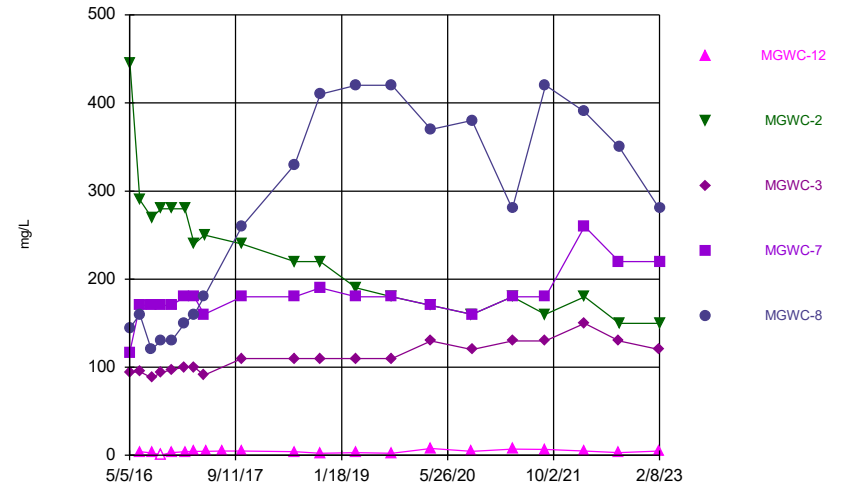


### Time Series



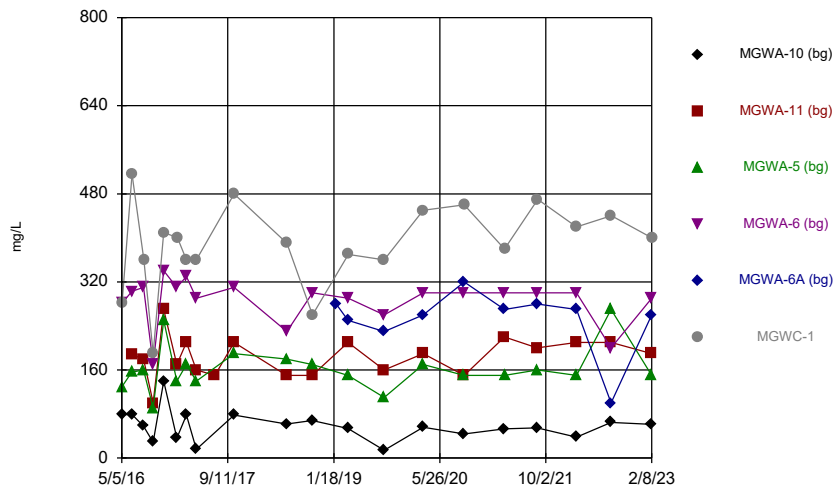
Constituent: Sulfate Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



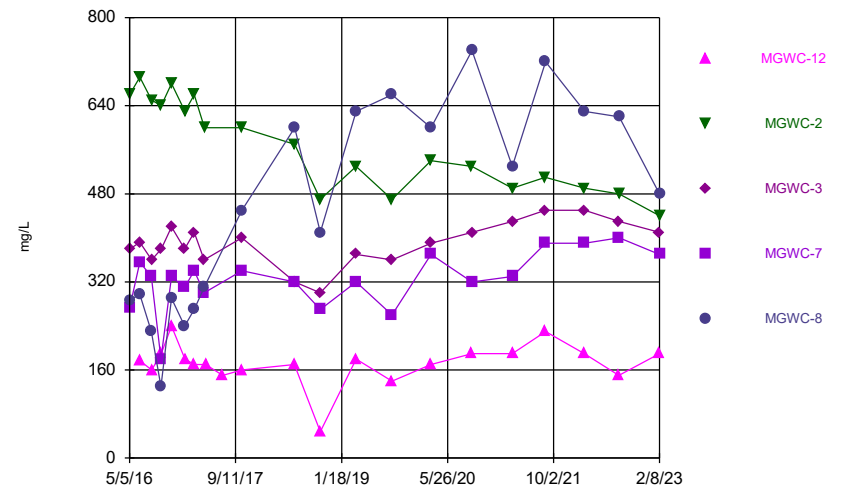
Constituent: Sulfate Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



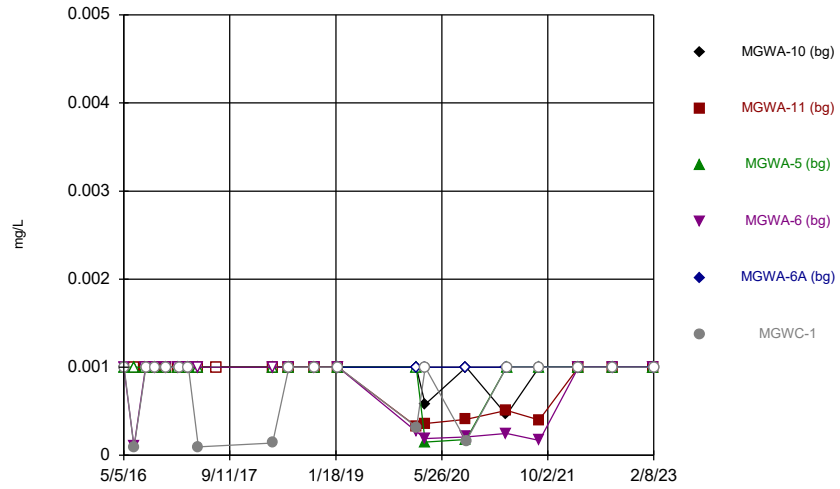
Constituent: TDS Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



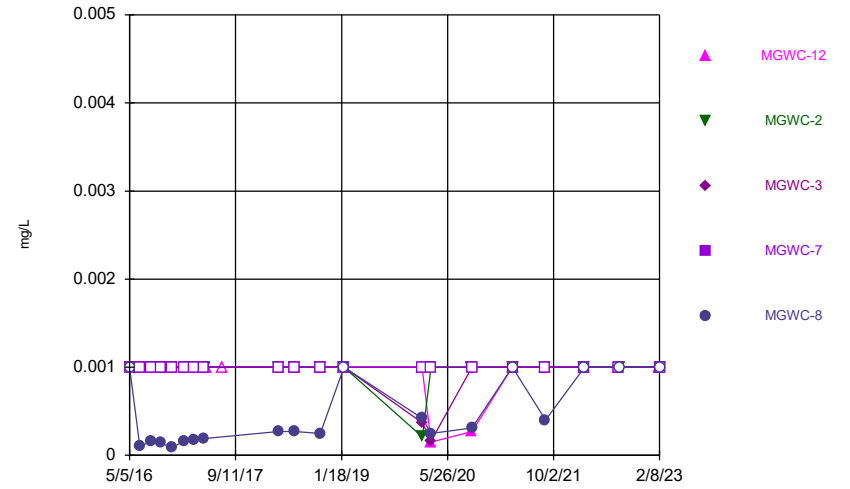
Constituent: TDS Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: Thallium Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Time Series



Constituent: Thallium Analysis Run 3/23/2023 8:45 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

# Time Series

Constituent: Antimony (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.002	<0.002	<0.002	<0.002	<0.002	
2/8/2023						<0.002

# Time Series

Constituent: Antimony (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.002		<0.002		
2/8/2023		<0.002		0.00051 (J)	<0.002

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/23/2023 8:45 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		<0.00125	<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	<0.00125				
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
2/7/2023	<0.001	0.0025	<0.001	0.011	0.013	
2/8/2023						0.0016

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/23/2023 8:45 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	<0.005	<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)
2/7/2023	0.00098 (J)		0.0018		
2/8/2023		<0.001		<0.001	0.001

# Time Series

Constituent: Barium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	0.021	0.1	0.028	0.03	0.032	
2/8/2023						0.1

# Time Series

Constituent: Barium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	0.06		0.16		
2/8/2023		0.044		0.02	0.052



# Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
2/8/2023						<0.0025

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/23/2023 8:45 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)
2/7/2023	<0.0025		<0.0025		
2/8/2023		<0.0025		<0.0025	0.0002 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.08	0.028 (J)	0.022 (J)	0.028 (J)	0.039 (J)	
2/8/2023						1.5

# Time Series

Constituent: Boron (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	0.067 (J)		0.63		
2/8/2023		1.8		2.1	3.9

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/23/2023 8:45 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)
2/7/2023	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
2/8/2023						0.00012 (J)

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.0025		<0.0025		
2/8/2023		0.0021 (J)		<0.0025	0.0018 (J)

# Time Series

Constituent: Calcium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	3.6	34	26	110	99	
2/8/2023						110

# Time Series

Constituent: Calcium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	30		110		
2/8/2023		100		65	110



# Time Series

Constituent: Chloride (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	7	4.2	4.7	3.1	3.2	
2/8/2023						12

# Time Series

Constituent: Chloride (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	4.2		11		
2/8/2023		11		11	13

# Time Series

Constituent: Chromium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	0.0053	<0.002	<0.002	<0.002	<0.002	
2/8/2023						0.0014 (J)

# Time Series

Constituent: Chromium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	0.0012 (J)		<0.002		
2/8/2023		<0.002		0.0013 (J)	0.0013 (J)

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.0025	<0.0025	<0.0025	0.00023 (J)	0.00069 (J)	
2/8/2023						<0.0025

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.0025		0.0025		
2/8/2023		0.0012 (J)		0.0044	0.0019 (J)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	0.671	0.858	0.0887 (U)	0.487 (U)	0.701	
2/8/2023						1.77

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	0.849		2.14		
2/8/2023		0.799		1.88	1.11



# Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/23/2023 8:45 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)	<0.2		
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	<0.2		0.2
7/13/2017		0.12 (J)				
10/10/2017	<0.1	0.086 (J)	<0.1	<0.2		0.18 (J)
3/29/2018	<0.1	<0.1	0.084 (J)	<0.2		0.16 (J)
6/12/2018	<0.1	0.16 (J)	<0.1			
6/13/2018				<0.2		0.14 (J)
10/9/2018	<0.1	0.16 (J)	0.086 (J)			
10/10/2018				<0.2		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
2/7/2023	<0.1	0.07 (J)	0.069 (J)	0.06 (J)	0.064 (J)	
2/8/2023						0.11

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/23/2023 8:45 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)	<0.2		
9/28/2016				0.4	0.1 (J)
9/29/2016	0.26	<0.2	0.082 (J)		
11/16/2016	0.25	<0.2	0.087 (J)	0.36	0.091 (J)
1/17/2017			0.086 (J)	0.2	<0.082
1/18/2017	0.26	<0.2			
3/2/2017	0.28	0.15 (J)	0.15 (J)	0.36	0.16 (J)
4/18/2017			<0.2	0.29	<0.082
4/19/2017		<0.2			
4/25/2017	0.25				
7/13/2017	0.21				
10/10/2017	0.22	<0.2	<0.2	0.28	<0.082
3/29/2018	0.23			0.23	
3/30/2018		<0.2	<0.2		0.088 (J)
6/12/2018	0.23				
6/13/2018		<0.2	<0.2	0.2	0.15 (J)
10/10/2018	0.25	0.085 (J)	<0.2	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)
2/7/2023	0.25		0.076 (J)		
2/8/2023		0.074 (J)		0.14	0.084 (J)

# Time Series

Constituent: Lead (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
2/8/2023						<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.001		<0.001		
2/8/2023		<0.001		<0.001	<0.001

# Time Series

Constituent: Lithium (mg/L) Analysis Run 3/23/2023 8:45 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	<0.05		<0.05	<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	<0.025
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
2/7/2023	0.0081	0.022	0.011	<0.005	<0.005	
2/8/2023						0.01

# Time Series

Constituent: Lithium (mg/L) Analysis Run 3/23/2023 8:45 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		<0.05	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
2/7/2023	0.024		0.014		
2/8/2023		0.0065		0.14	0.012

# Time Series

Constituent: Mercury (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
2/8/2023						<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.0002		<0.0002		
2/8/2023		<0.0002		<0.0002	0.00026



# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/23/2023 8:45 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		<0.075
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		<0.075
1/28/2019	<0.015	<0.015				
1/29/2019			<0.015	<0.015	<0.015	<0.075
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)	<0.075
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)
2/7/2023	<0.015	0.00098 (J)	<0.015	<0.015	<0.015	
2/8/2023						0.0012 (J)

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.015		<0.015		
2/8/2023		<0.015		<0.015	<0.015

# Time Series

Constituent: pH (SU) Analysis Run 3/23/2023 8:45 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
2/7/2023	5.46	7.72	7.85	7.13	7.24	
2/8/2023						7.28

# Time Series

Constituent: pH (SU) Analysis Run 3/23/2023 8:45 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
2/7/2023	6.95		7.01		
2/8/2023		7.44		7.43	6.76

# Time Series

Constituent: Selenium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.005	<0.005	<0.005	<0.005	<0.005	
2/8/2023						<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.005		<0.005		
2/8/2023		<0.005		<0.005	<0.005

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/23/2023 8:45 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	<1.3	7.8	21		110
11/16/2016	1.7	<1.3	6.7	20		130
1/16/2017	<1					
1/17/2017		<1.3	6.7	19		
1/19/2017						160
3/2/2017	1.4	<1.3	5.6	15		130
4/18/2017	1.3	<1.3	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	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
2/7/2023	<1	3.3	2.5	2.3	1.6	
2/8/2023						140

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	4.7		120		
2/8/2023		150		220	280



# Time Series

Constituent: TDS (mg/L) Analysis Run 3/23/2023 8:45 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	100 (D)	
8/3/2022						440
2/7/2023	61	190	150	290	260	
2/8/2023						400

# Time Series

Constituent: TDS (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	190		410		
2/8/2023		440		370	480

# Time Series

Constituent: Thallium (mg/L) Analysis Run 3/23/2023 8:45 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
2/7/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
2/8/2023						<0.001

# Time Series

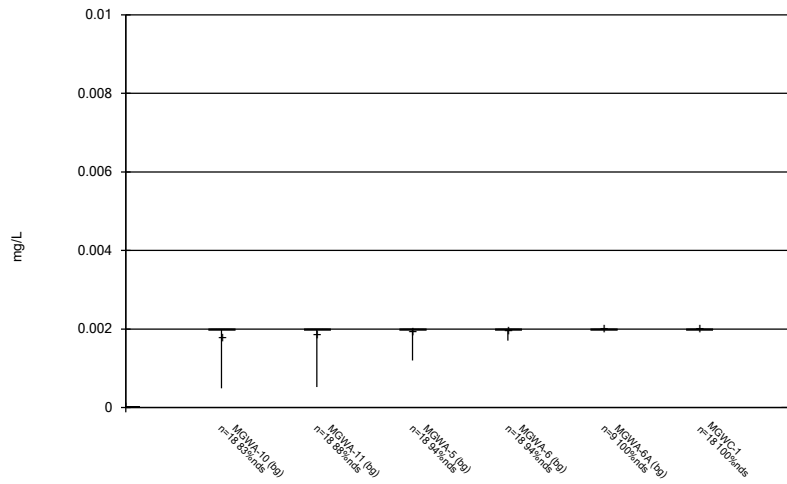
Constituent: Thallium (mg/L) Analysis Run 3/23/2023 8:45 PM View: Constituents View

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
2/7/2023	<0.001		<0.001		
2/8/2023		<0.001		<0.001	<0.001

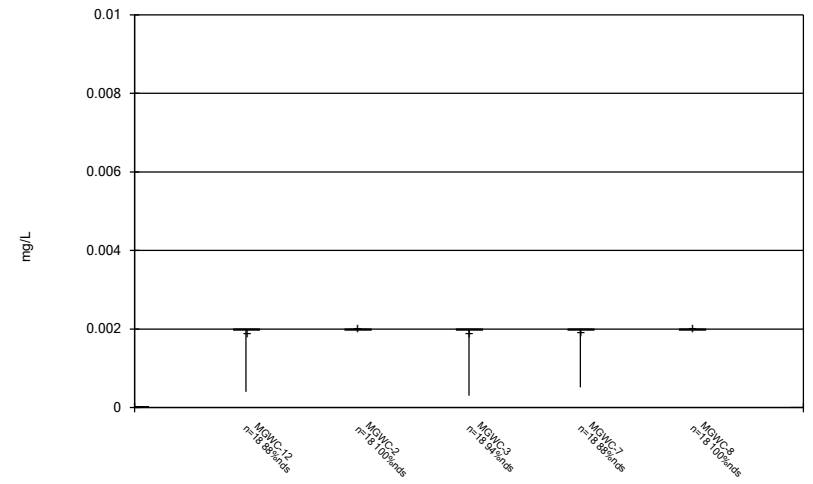
FIGURE B.

Box & Whiskers Plot



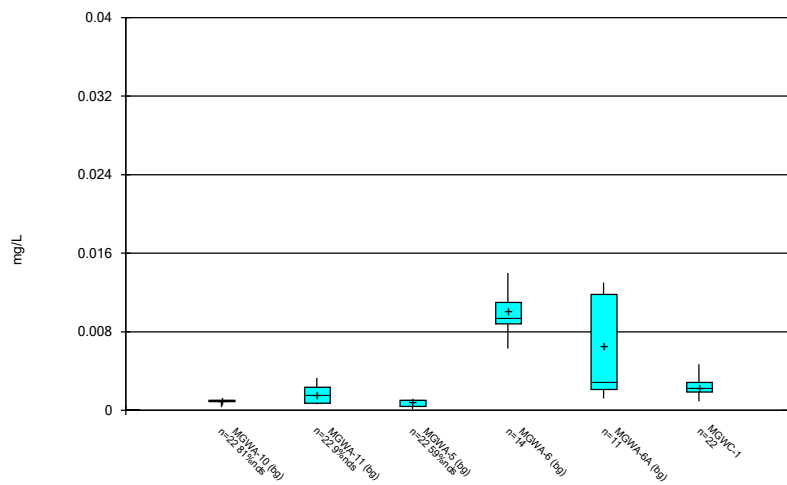
Constituent: Antimony Analysis Run 3/23/2023 8:58 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



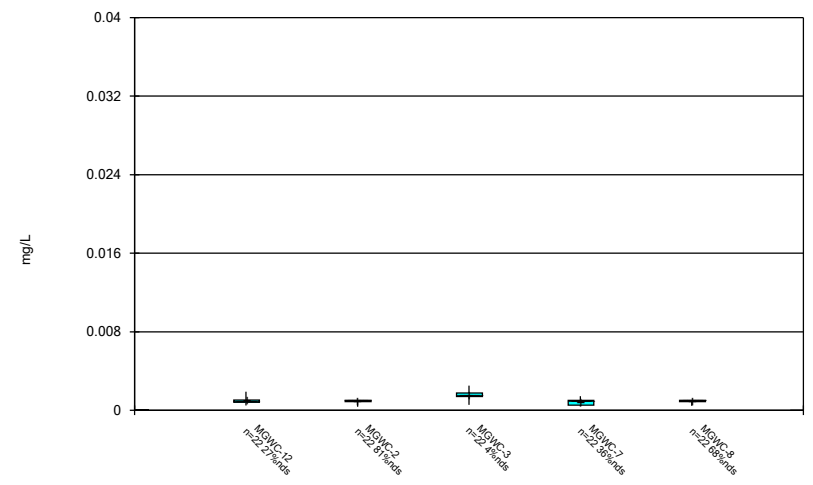
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



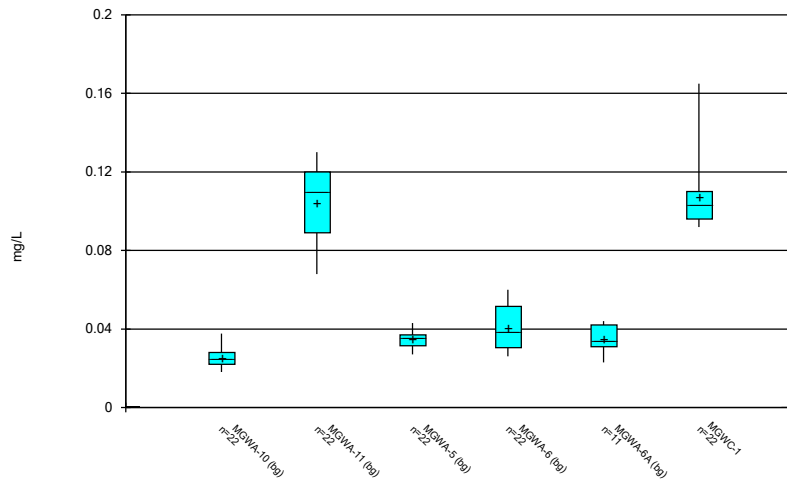
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



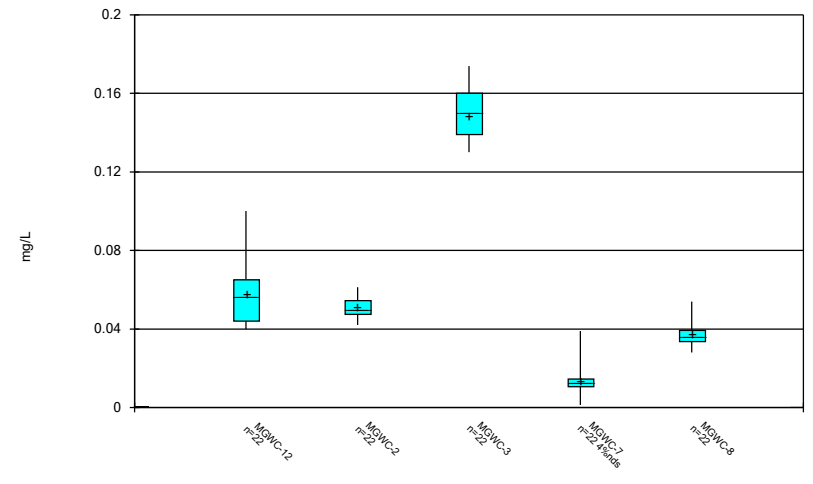
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



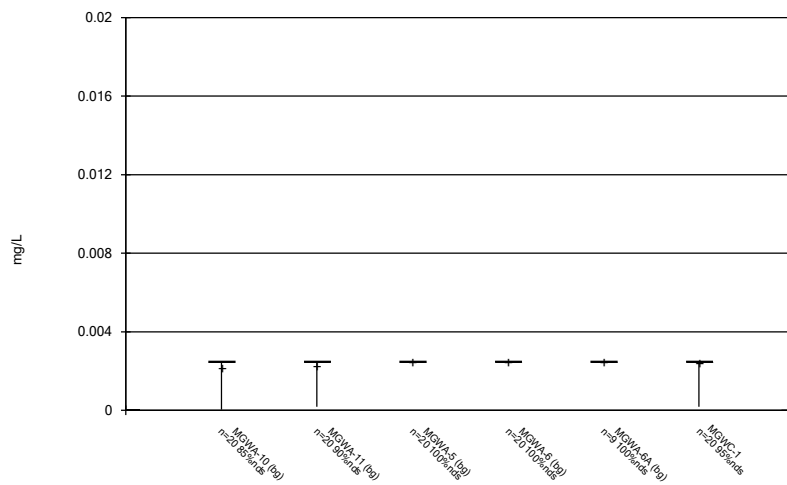
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



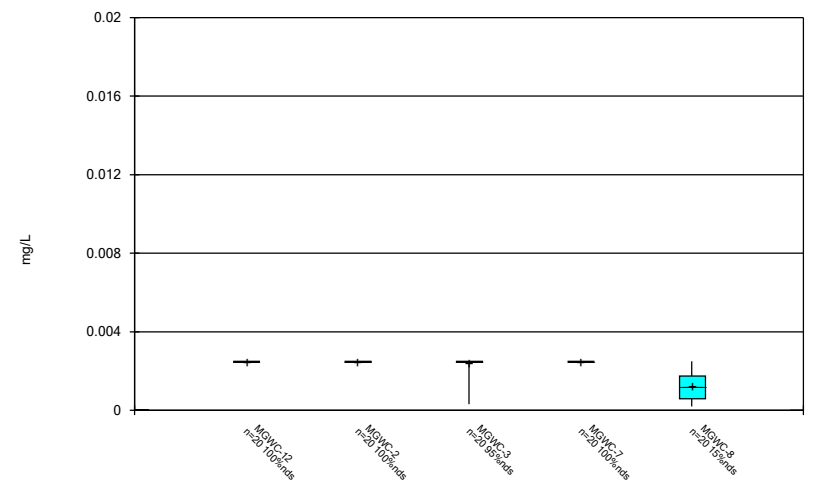
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



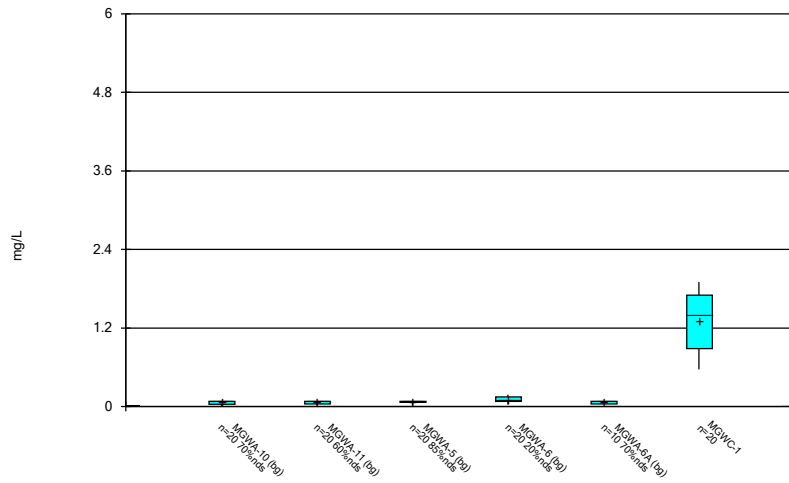
Constituent: Beryllium Analysis Run 3/23/2023 8:58 PM View: Constituents View  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



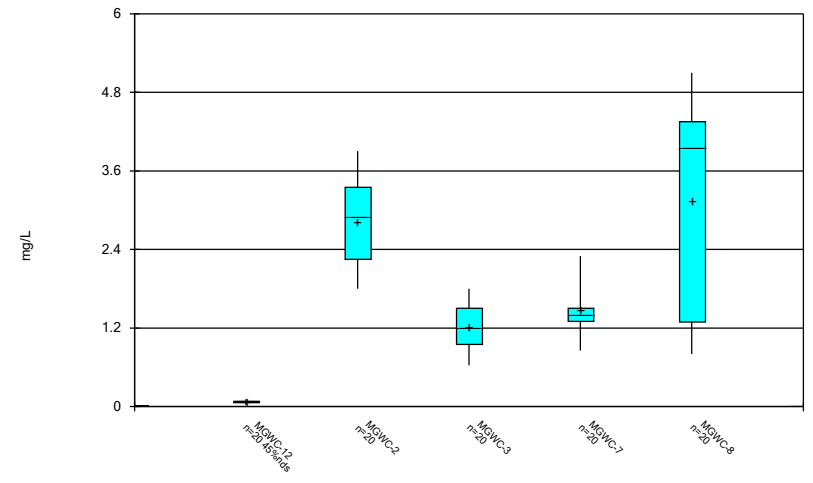
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



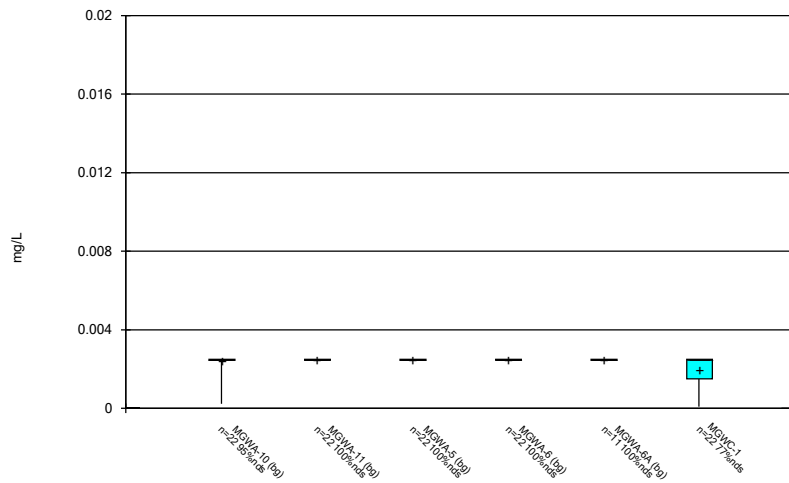
Constituent: Boron Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



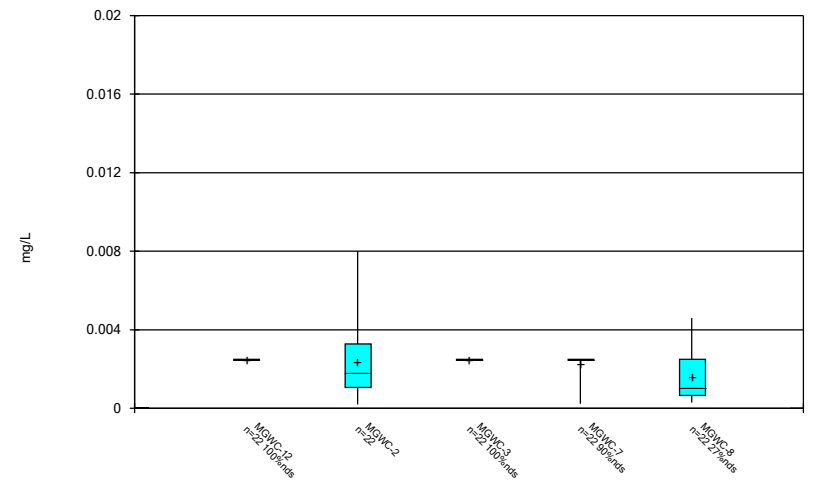
Constituent: Boron Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

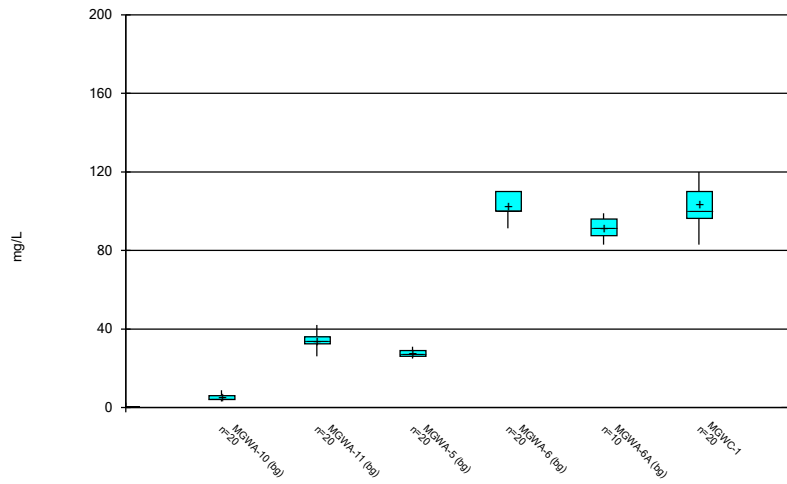
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

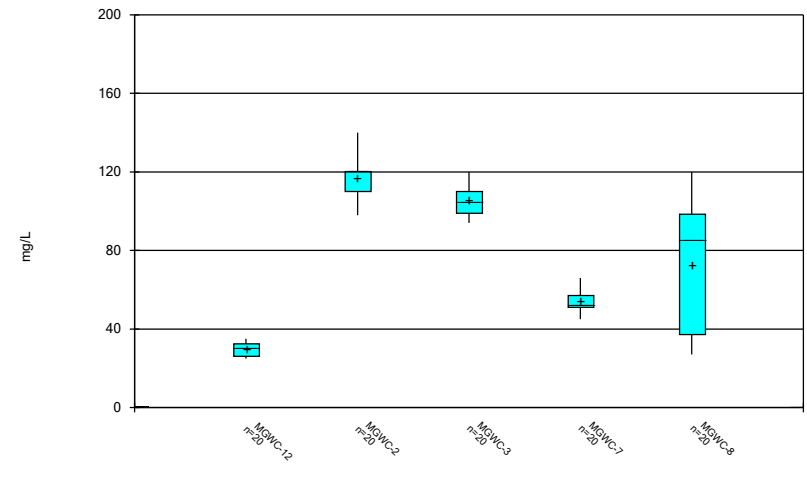


Box & Whiskers Plot



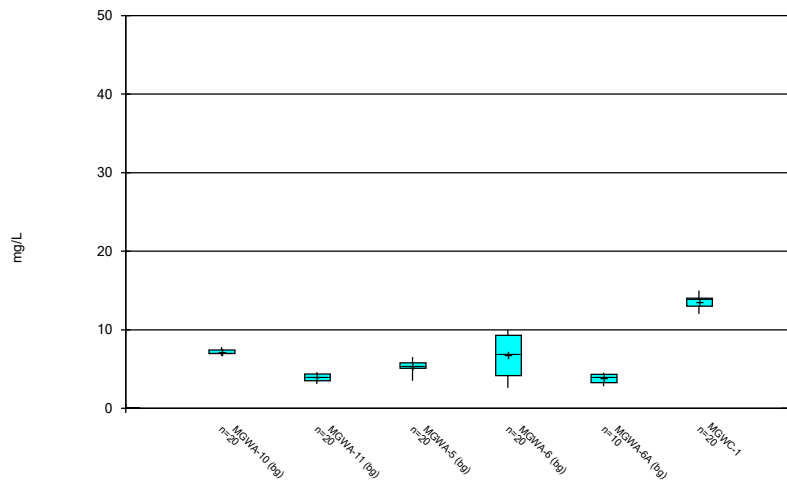
Constituent: Calcium Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



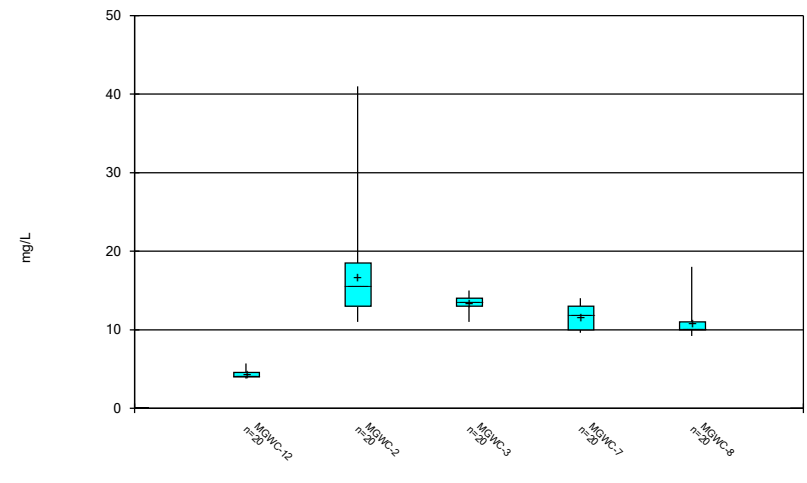
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



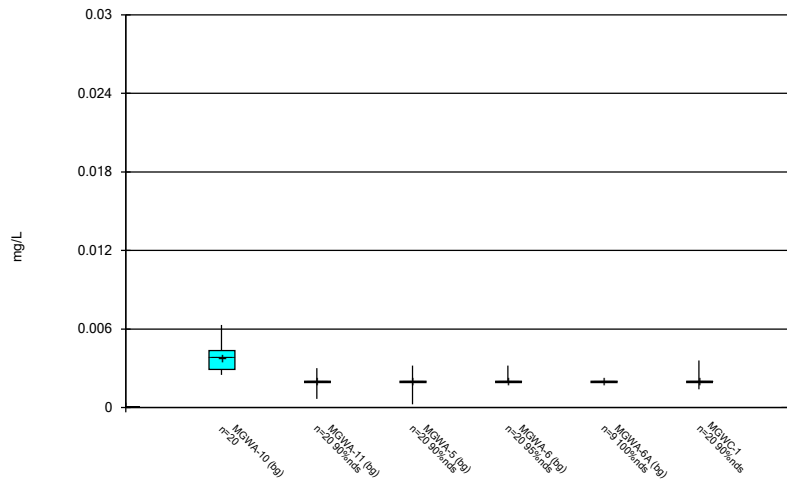
Constituent: Chloride Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



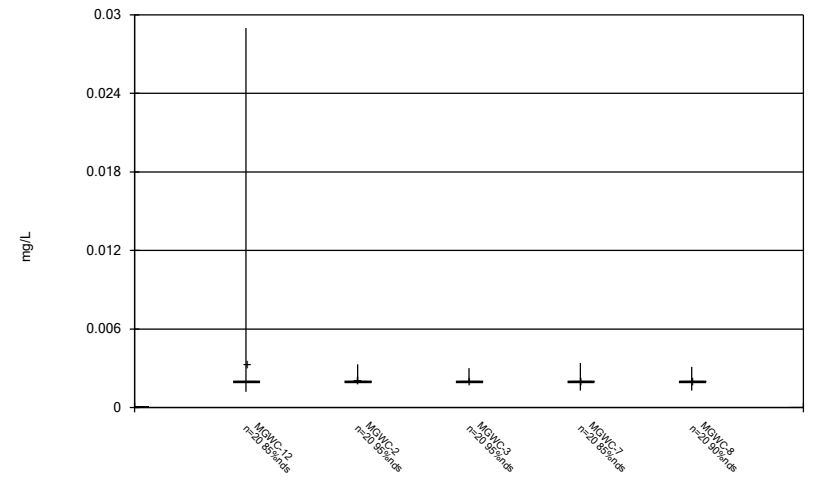
Constituent: Chloride Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



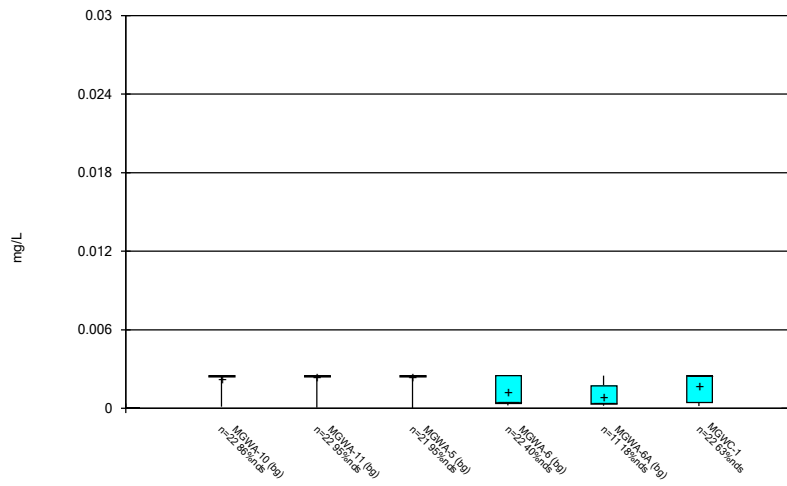
Constituent: Chromium Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



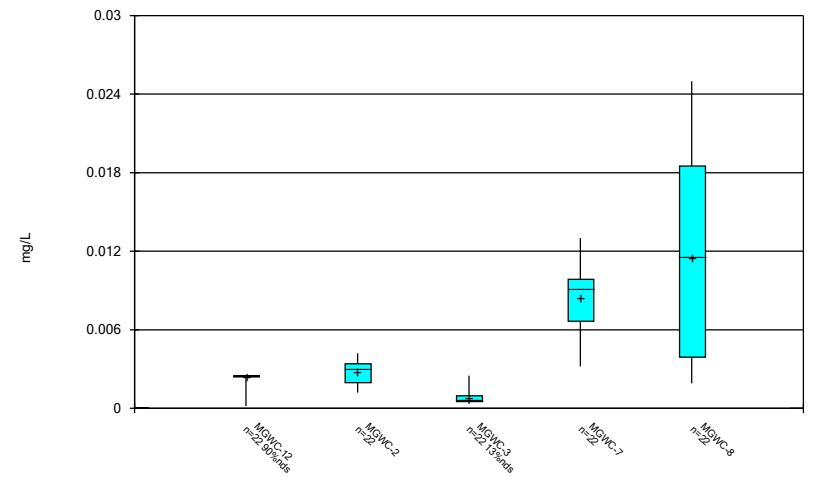
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



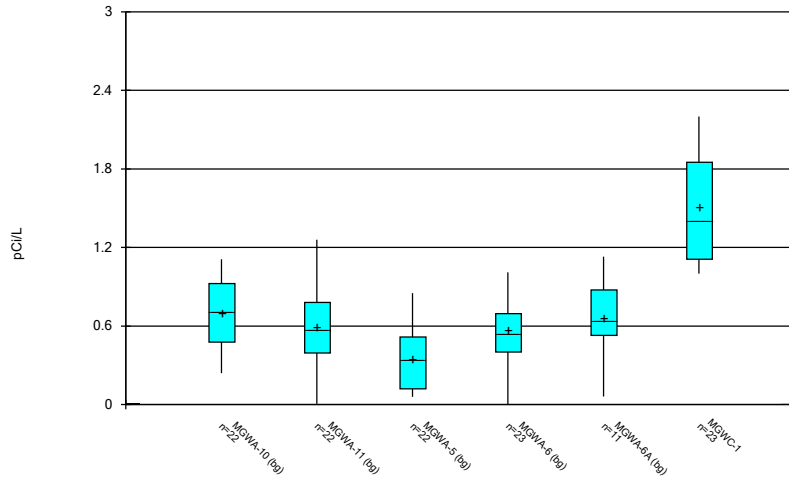
Constituent: Cobalt Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



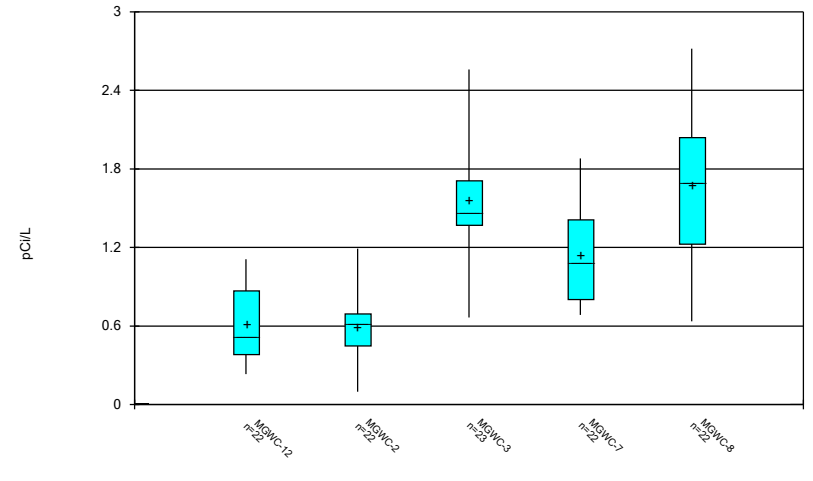
Constituent: Cobalt Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



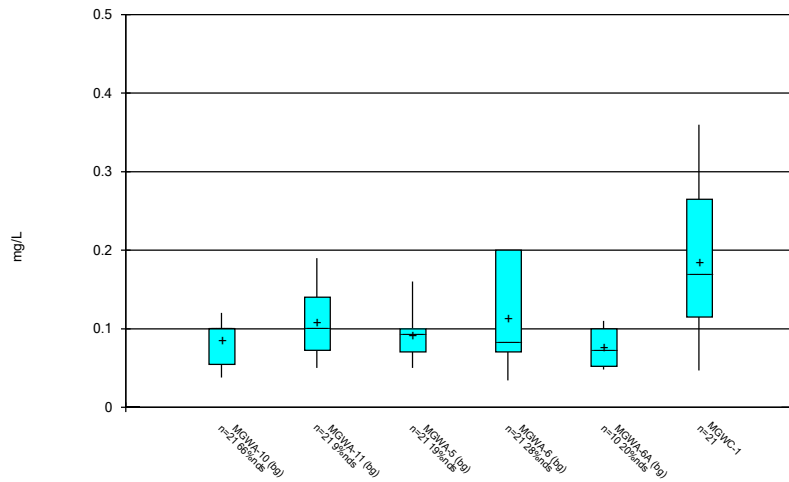
Constituent: Combined Radium 226 + 228 Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



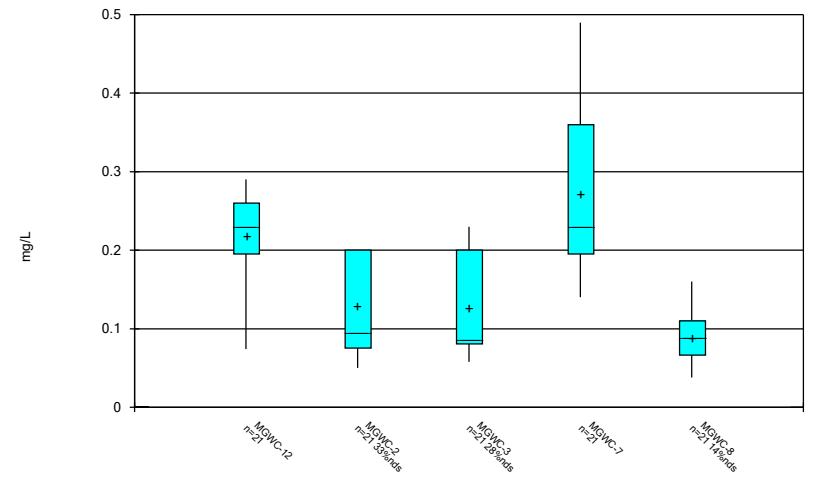
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



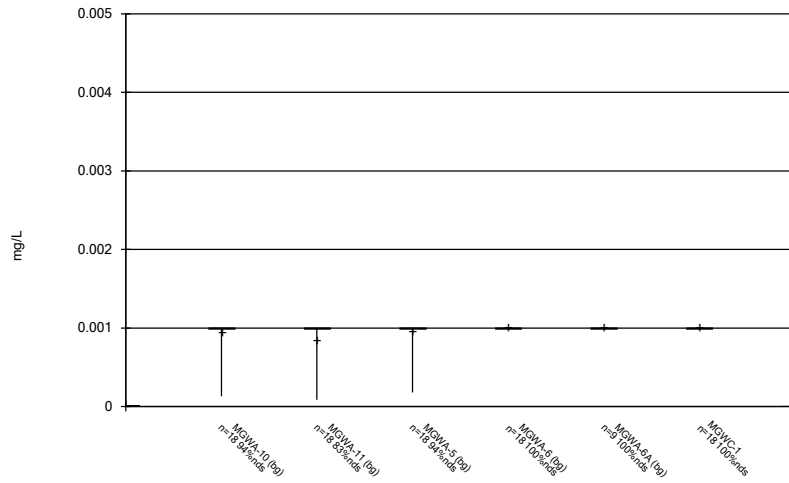
Constituent: Fluoride Analysis Run 3/23/2023 8:58 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Box & Whiskers Plot



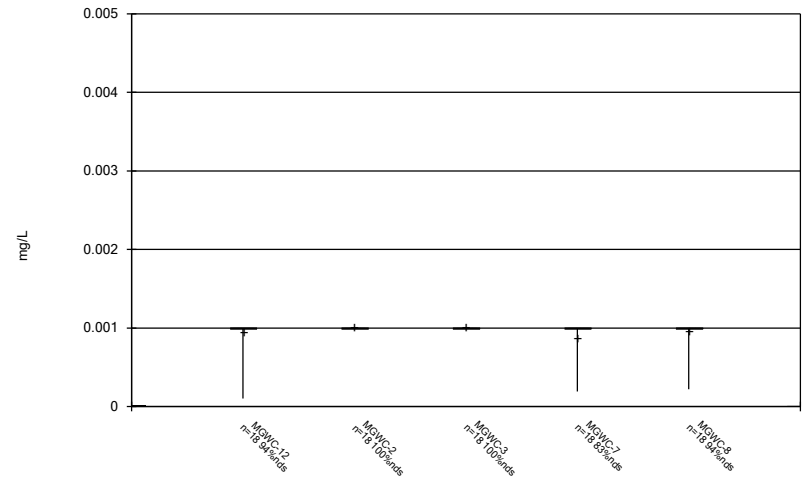
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Box & Whiskers Plot



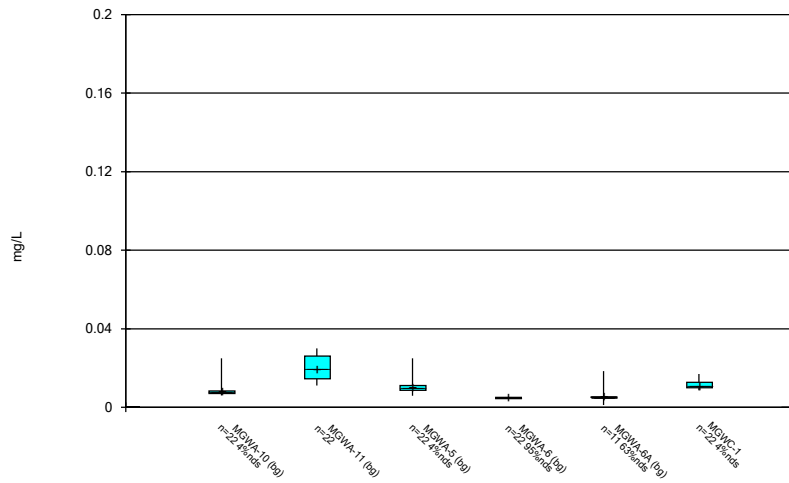
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



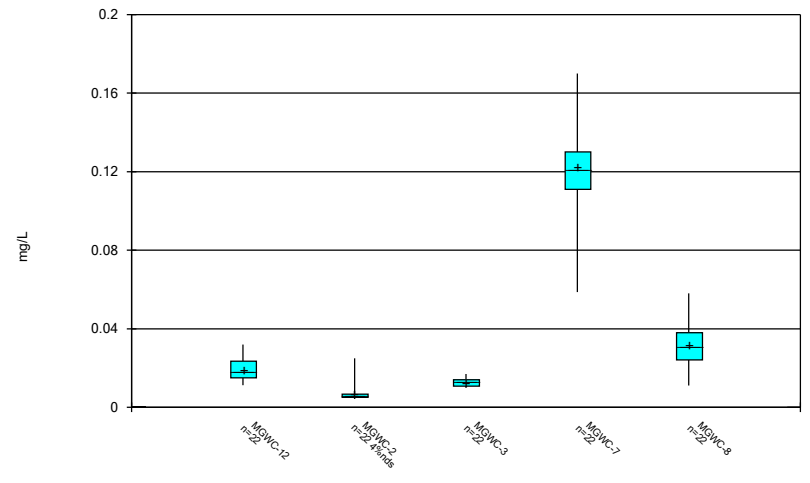
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



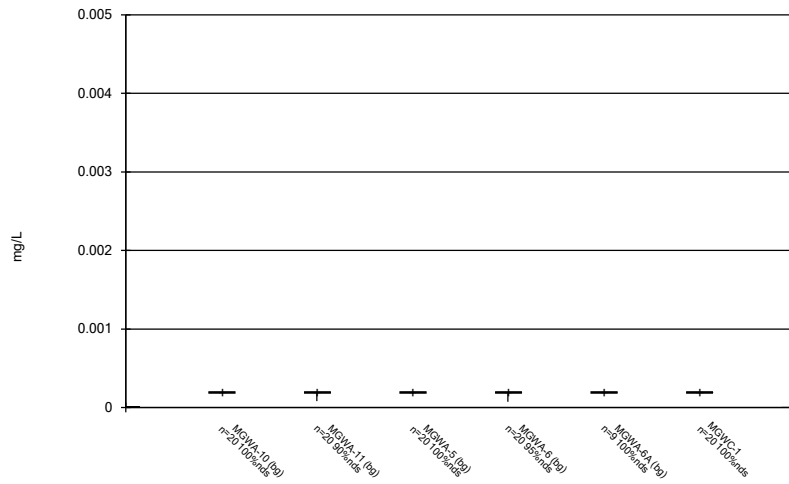
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Box & Whiskers Plot



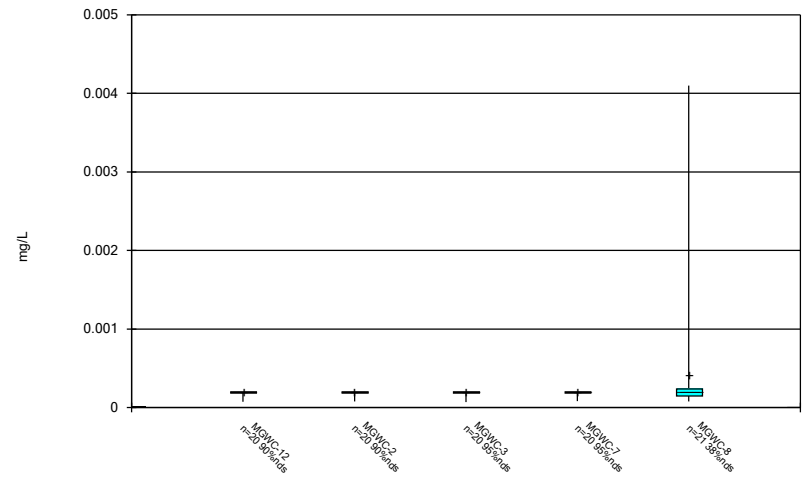
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



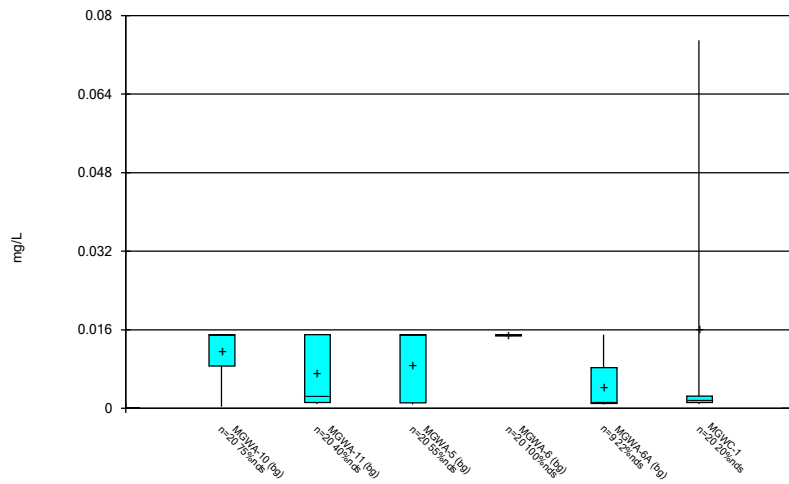
Constituent: Mercury Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



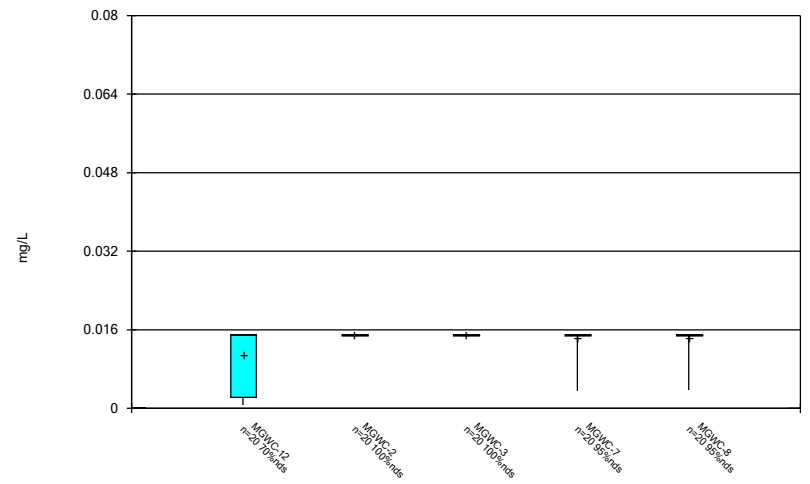
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



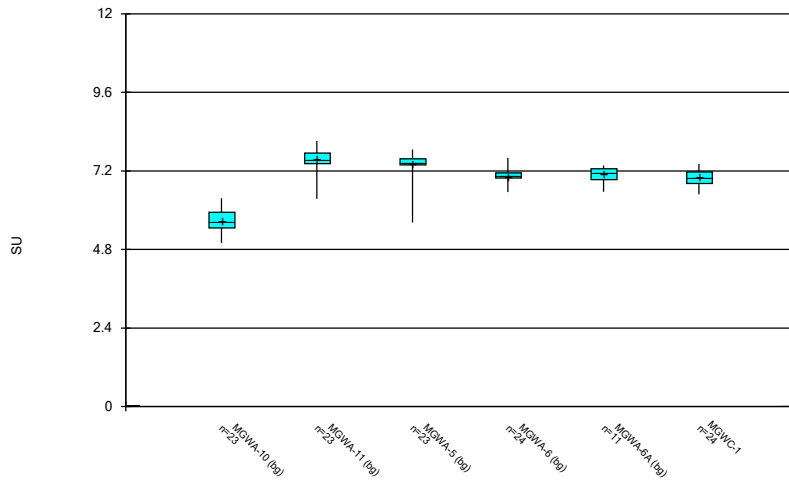
Constituent: Molybdenum Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



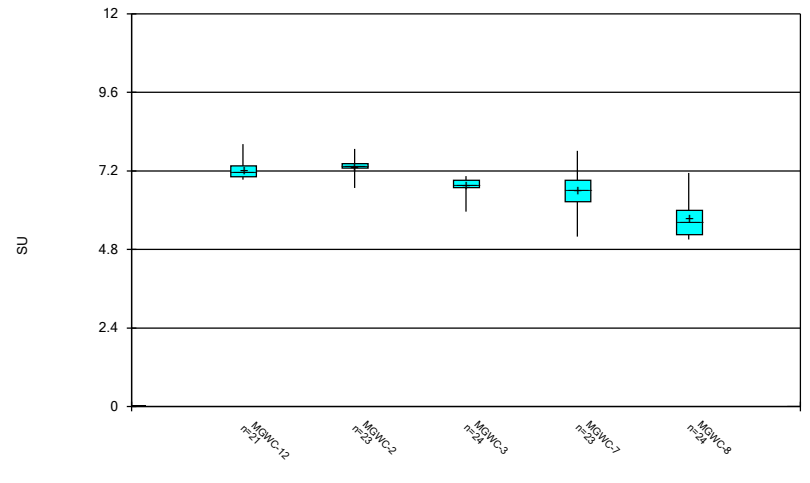
Constituent: Molybdenum Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



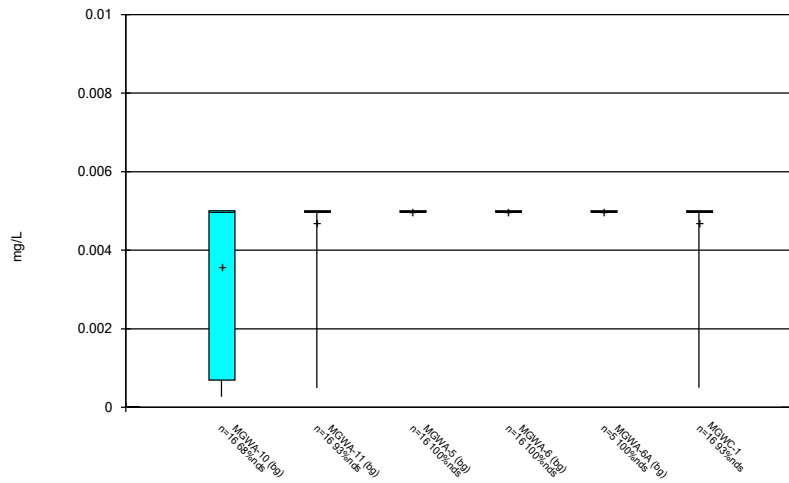
Constituent: pH Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



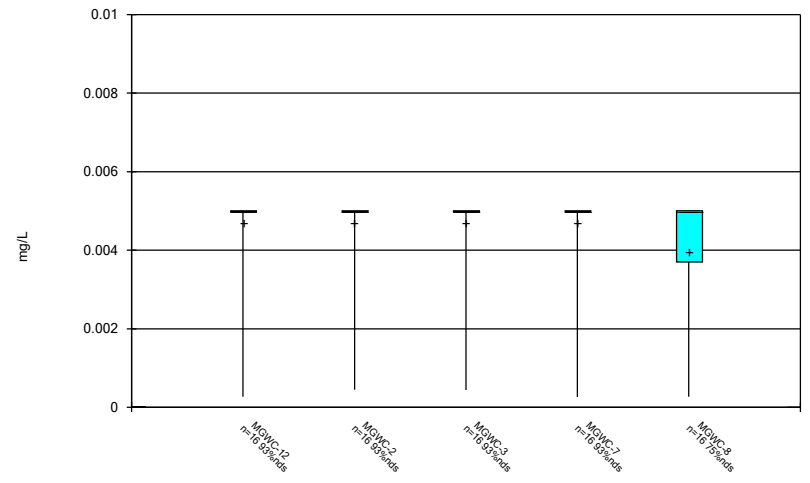
Constituent: pH Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



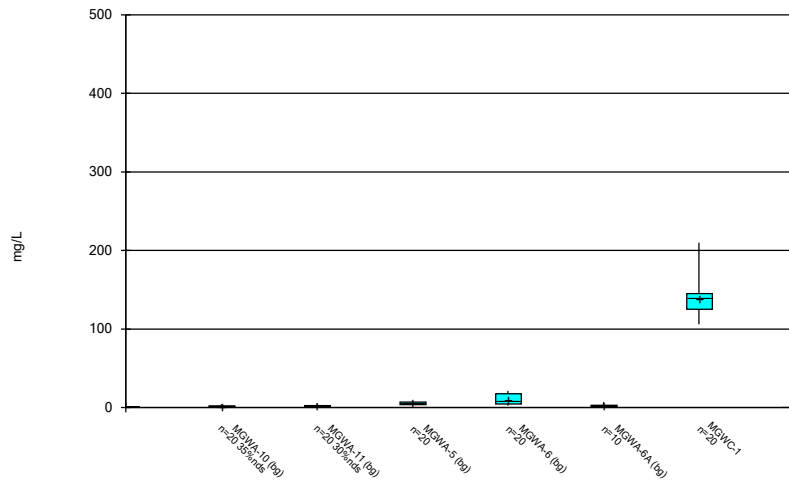
Constituent: Selenium Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



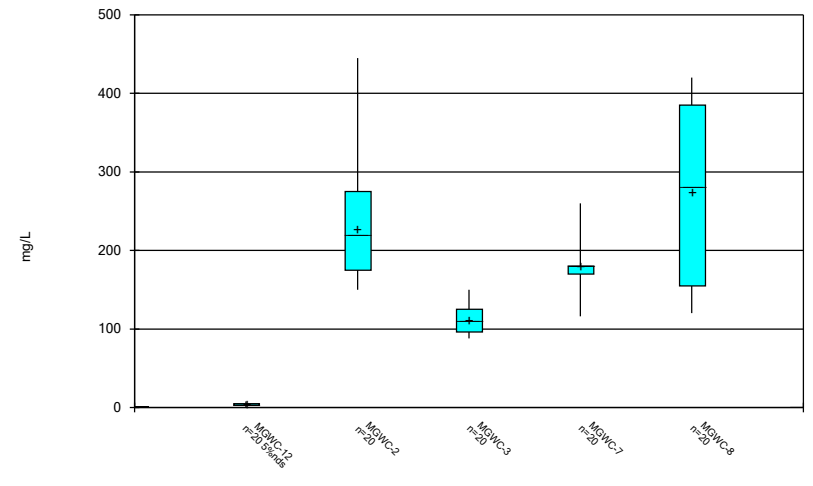
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



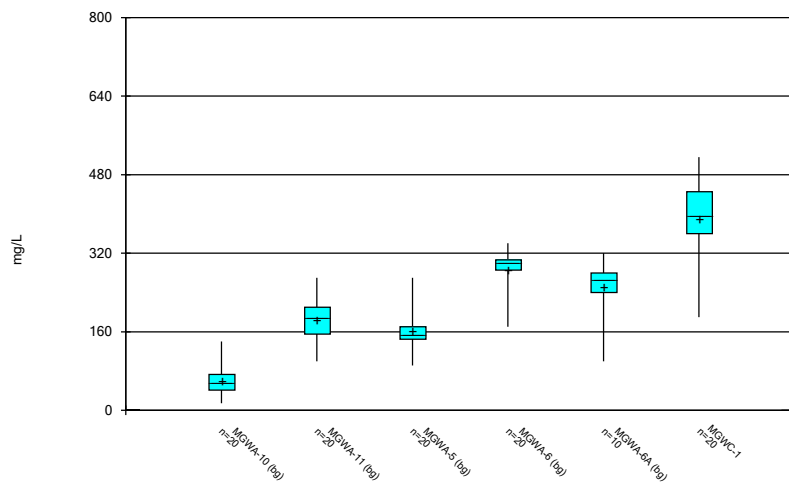
Constituent: Sulfate Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



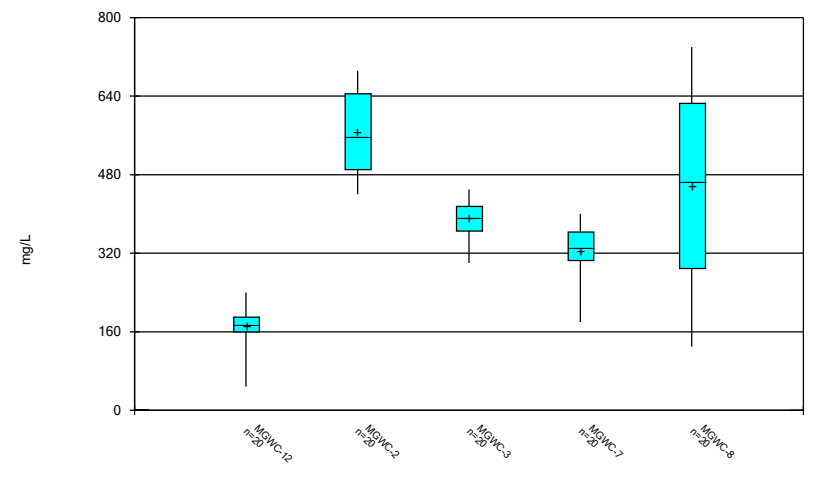
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



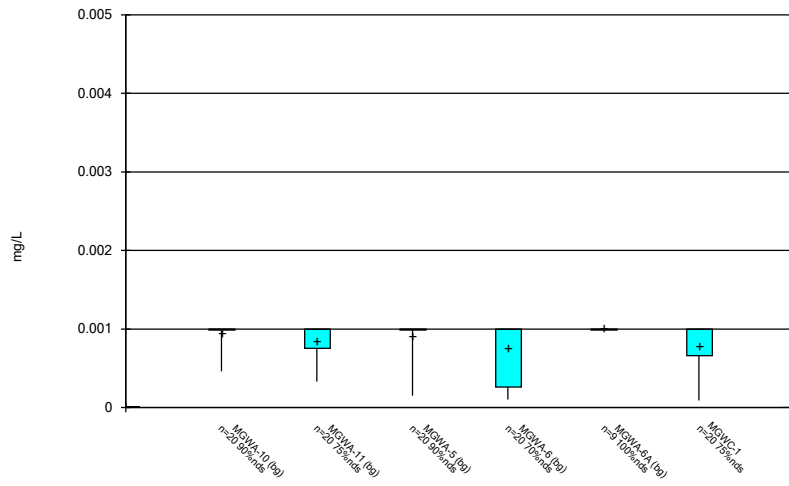
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Box & Whiskers Plot



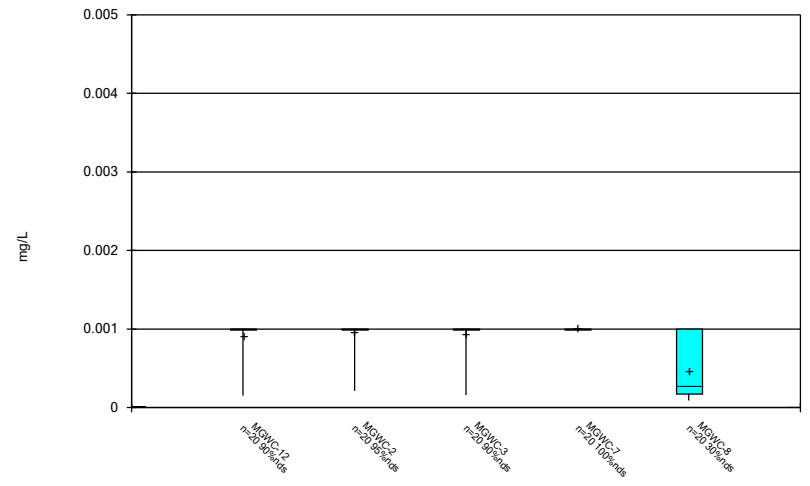
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: Thallium Analysis Run 3/23/2023 8:59 PM View: Constituents View  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: Thallium Analysis Run 3/23/2023 8:59 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 3/23/2023, 12:00 AM

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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 3/7/2023, 4:02 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	2/8/2023	1.5	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	2/8/2023	1.8	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	2/7/2023	0.63	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	2/8/2023	2.1	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	2/8/2023	3.9	Yes	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
Chloride (mg/L)	MGWC-1	9.334	n/a	2/8/2023	12	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.334	n/a	2/8/2023	11	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.334	n/a	2/7/2023	11	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.334	n/a	2/8/2023	11	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.334	n/a	2/8/2023	13	Yes	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	2/7/2023	0.25	Yes	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	17.96	n/a	2/8/2023	140	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	17.96	n/a	2/8/2023	150	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	17.96	n/a	2/7/2023	120	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	17.96	n/a	2/8/2023	220	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	17.96	n/a	2/8/2023	280	Yes	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	346.6	n/a	2/8/2023	400	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	346.6	n/a	2/8/2023	440	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	346.6	n/a	2/7/2023	410	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	346.6	n/a	2/8/2023	370	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	346.6	n/a	2/8/2023	480	Yes	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2

# Interwell Prediction Limits - All Results

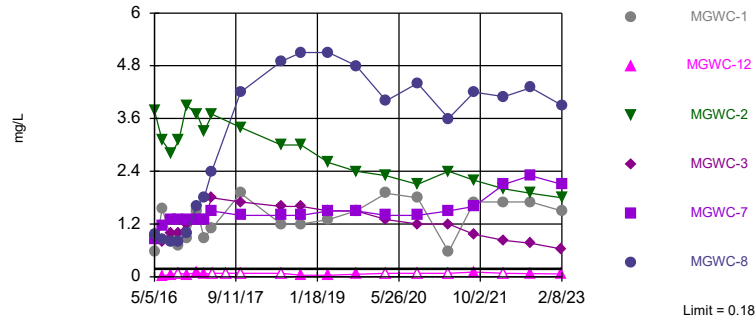
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/7/2023, 4:02 PM

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>2/8/2023</b>	<b>1.5</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	MGWC-12	0.18	n/a	2/7/2023	0.067J	No	90	n/a	n/a	60	n/a	n/a	0.0002374	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>0.18</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>1.8</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</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>2/7/2023</b>	<b>0.63</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</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>2/8/2023</b>	<b>2.1</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</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>2/8/2023</b>	<b>3.9</b>	<b>Yes</b>	<b>90</b>	<b>n/a</b>	<b>n/a</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002374</b>	<b>NP Inter (NDs) 1 of 2</b>
Calcium (mg/L)	MGWC-1	110	n/a	2/8/2023	110	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	2/7/2023	30	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	2/8/2023	100	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	2/7/2023	110	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-7	110	n/a	2/8/2023	65	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	2/8/2023	110	No	90	n/a	n/a	0	n/a	n/a	0.0002374	NP Inter (normality) 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-1</b>	<b>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>12</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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	9.334	n/a	2/7/2023	4.2	No	90	2.338	0.3884	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>11</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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>9.334</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>11</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>11</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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>9.334</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>13</b>	<b>Yes</b>	<b>90</b>	<b>2.338</b>	<b>0.3884</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	2/8/2023	0.11	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
<b>Fluoride (mg/L)</b>	<b>MGWC-12</b>	<b>0.19</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>0.25</b>	<b>Yes</b>	<b>94</b>	<b>n/a</b>	<b>n/a</b>	<b>29.79</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002197</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	MGWC-2	0.19	n/a	2/8/2023	0.074J	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	2/7/2023	0.076J	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	2/8/2023	0.14	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-8	0.19	n/a	2/8/2023	0.084J	No	94	n/a	n/a	29.79	n/a	n/a	0.0002197	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	8.12	5	2/8/2023	7.28	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-12	8.12	5	2/7/2023	6.95	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-2	8.12	5	2/8/2023	7.44	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-3	8.12	5	2/7/2023	7.01	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-7	8.12	5	2/8/2023	7.43	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
pH (SU)	MGWC-8	8.12	5	2/8/2023	6.76	No	104	n/a	n/a	0	n/a	n/a	0.000363	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-1</b>	<b>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>140</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</b>	<b>None</b>	<b>ln(x)</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MGWC-12	17.96	n/a	2/7/2023	4.7	No	90	0.9196	1.066	14.44	None	ln(x)	0.001254	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>150</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>17.96</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>120</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>220</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>17.96</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>280</b>	<b>Yes</b>	<b>90</b>	<b>0.9196</b>	<b>1.066</b>	<b>14.44</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>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>400</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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	346.6	n/a	2/7/2023	190	No	90	181.2	89.53	0	None	No	0.001254	Param Inter 1 of 2
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>440</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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>346.6</b>	<b>n/a</b>	<b>2/7/2023</b>	<b>410</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>370</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</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>346.6</b>	<b>n/a</b>	<b>2/8/2023</b>	<b>480</b>	<b>Yes</b>	<b>90</b>	<b>181.2</b>	<b>89.53</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.001254</b>	<b>Param Inter 1 of 2</b>

Sanitas™ v.9.6.36 . UG  
Hollow symbols indicate censored values.

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Non-parametric



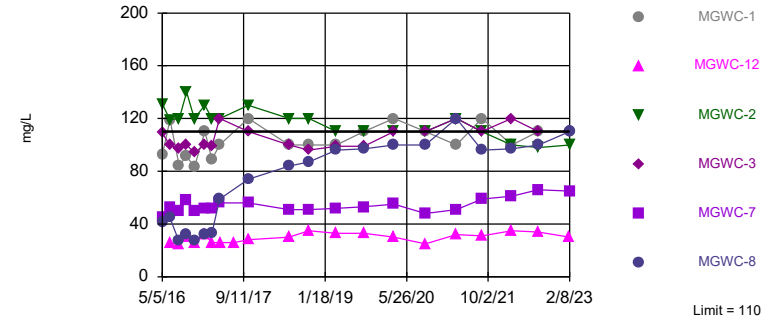
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 90 background values. 60% NDs. Annual per-constituent alpha = 0.002845. Individual comparison alpha = 0.0002374 (1 of 2). Comparing 6 points to limit.

Constituent: Boron Analysis Run 3/7/2023 4:00 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sanitas™ v.9.6.36 . UG

Within Limit

Prediction Limit  
Interwell Non-parametric



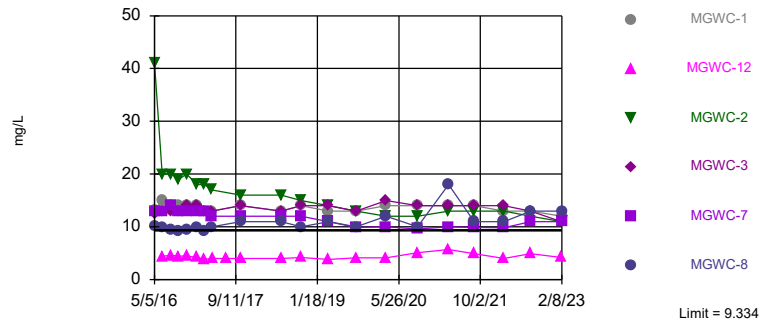
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 90 background values. Annual per-constituent alpha = 0.002845. Individual comparison alpha = 0.0002374 (1 of 2). Comparing 6 points to limit.

Constituent: Calcium Analysis Run 3/7/2023 4:00 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sanitas™ v.9.6.36 . UG

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit  
Interwell Parametric



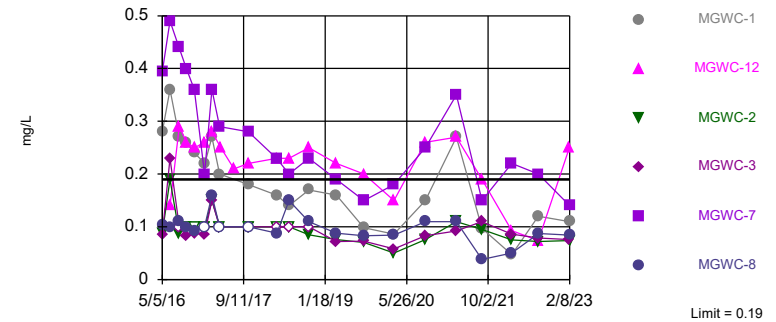
Background Data Summary (based on square root transformation): Mean=2.338, Std. Dev.=0.3884, n=90. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9724, critical = 0.961. Kappa = 1.847 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Chloride Analysis Run 3/7/2023 4:00 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sanitas™ v.9.6.36 . UG  
Hollow symbols indicate censored values.

Exceeds Limit: MGWC-12

Prediction Limit  
Interwell Non-parametric

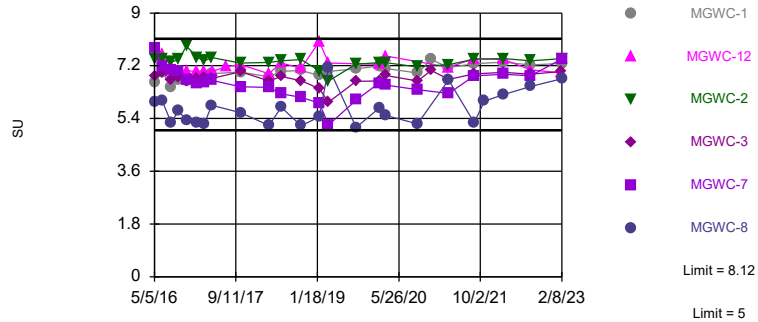


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 94 background values. 29.79% NDs. Annual per-constituent alpha = 0.002633. Individual comparison alpha = 0.0002197 (1 of 2). Comparing 6 points to limit.

Constituent: Fluoride Analysis Run 3/7/2023 4:00 PM View: Appendix III  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Within Limits

Prediction Limit  
Interwell Non-parametric



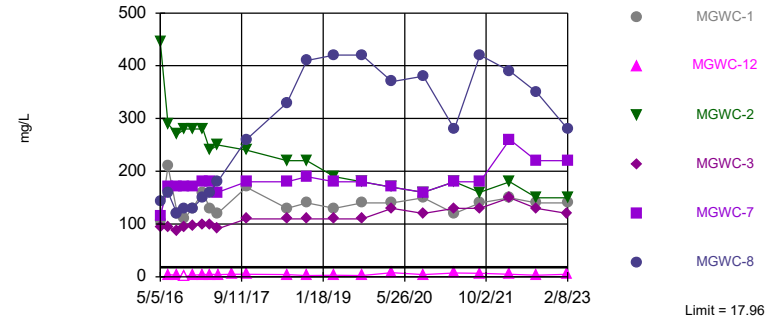
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 104 background values. Annual per-constituent alpha = 0.004352. Individual comparison alpha = 0.000363 (1 of 2). Comparing 6 points to limit.

Constituent: pH Analysis Run 3/7/2023 4:00 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

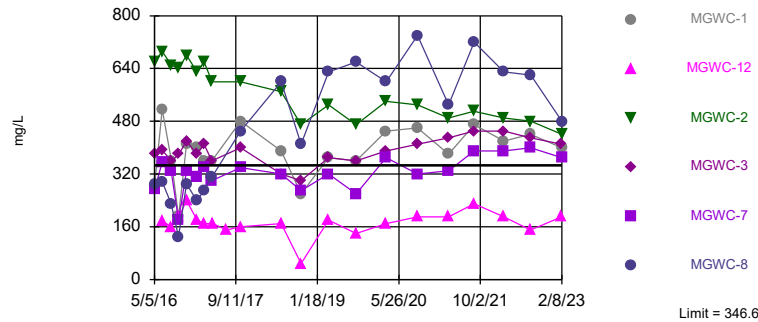


Background Data Summary (based on natural log transformation): Mean=0.9196, Std. Dev.=1.066, n=90, 14.44% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9699, critical = 0.961. Kappa = 1.847 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Sulfate Analysis Run 3/7/2023 4:00 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=181.2, Std. Dev.=89.53, n=90. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9658, critical = 0.961. Kappa = 1.847 (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 3/7/2023 4:00 PM View: Appendix III  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/7/2023 4:02 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	<0.08	0.976	0.157	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		0.862	0.124	1.15		0.792	1.55	3.1	
8/15/2016	0.022 (J)	0.8	0.18	1.3	0.023 (J)				0.032 (J)
8/16/2016						1	0.85	2.8	
9/28/2016	0.023 (J)	0.8	0.17	1.3	<0.08		0.7		0.021 (J)
9/29/2016						1		3.1	
11/16/2016	<0.08	0.98	0.17	1.3	<0.08	1.2	0.88	3.9	<0.08
1/16/2017	0.021 (J)								
1/17/2017		1.6	0.17	1.3	<0.08	1.3			<0.08
1/18/2017								3.7	
1/19/2017							1.5		
3/2/2017	<0.08	1.8	0.14	1.3	<0.08	1.3	0.89	3.3	<0.08
4/18/2017	<0.08	2.4	0.14	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)	4.2	0.12	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		4.9	0.11	1.4		1.6	1.2	3	
10/9/2018	<0.08				<0.08				<0.08
10/10/2018		5.1	0.096 (J)	1.4		1.6	1.2	3	
1/29/2019									
3/25/2019	<0.08				<0.08				<0.08
3/26/2019		5.1	0.079 (J)	1.5		1.5	1.3	2.6	
9/10/2019	<0.08	4.8	0.097	1.5	<0.08	1.5	1.5	2.4	<0.08
3/9/2020	0.045 (J)								<0.08
3/10/2020		4	0.051 (J)	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	
8/2/2022	<0.08		<0.08		<0.08				<0.08
8/3/2022				2.3		0.76	1.7		
8/4/2022		4.3						1.9	
2/7/2023	<0.08		0.028 (J)		0.022 (J)	0.63			0.028 (J)
2/8/2023		3.9		2.1			1.5	1.8	



# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/7/2023 4:02 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		
2/7/2023	0.067 (J)	0.039 (J)
2/8/2023		

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/7/2023 4:02 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	8.83	41.2	105	45	27				
5/6/2016						109	92.5	131	
6/20/2016	8.1				29.4				35.5
6/21/2016		44.7	91.2	52.8		99.7	119	119	
8/15/2016	6.1	27	94	50	26				34
8/16/2016						97	84	120	
9/28/2016	7.2	32	110	58	31		92		38
9/29/2016						100		140	
11/16/2016	5.2	27	98	50	26	94	83	120	33
1/16/2017	3.8								
1/17/2017		32	100	52	29	100			34
1/18/2017								130	
1/19/2017							110		
3/2/2017	5.4	33	100	52	28	99	89	120	35
4/18/2017	5	59	110	56	27	120	100		33
4/19/2017								120	
4/25/2017									
7/13/2017									30
10/10/2017	4.8	74	110	56	31	110	120	130	39
6/12/2018	4.8				25				26
6/13/2018		84	100	51		100	100	120	
10/9/2018	4.5				29				29
10/10/2018		87	100	51		96	100	120	
1/29/2019									
3/25/2019	4.6				27				37
3/26/2019		96	100	52		99	100	110	
9/10/2019	4.9	97	110	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	
8/2/2022	3.1		110		26				36
8/3/2022				66		110	110		
8/4/2022		100						98	
2/7/2023	3.6		110		26	110			34
2/8/2023		110		65			110	100	

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/7/2023 4:02 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		
2/7/2023	30	99
2/8/2023		

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/7/2023 4:02 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	7.35	10.1	9.67	13	6.51				
5/6/2016						12.5	13.2	41	
6/20/2016	7				5.9				4.3
6/21/2016		10	9.2	13		13	15	20	
8/15/2016	7.5	9.5	10	14	6.4				4.1
8/16/2016						13	14	20	
9/28/2016	7	9.2	10	13	6.1		14		3.9
9/29/2016						13		19	
11/16/2016	7.5	9.5	10	13	6.1	14	14	20	4.1
1/16/2017	7.7								
1/17/2017		10	9.4	13	5.7	14			3.9
1/18/2017								18	
1/19/2017							14		
3/2/2017	6.9	9.3	8.6	13	5.3	13	13	18	3.5
4/18/2017	6.8	10	8.9	12	5.3	13	13		3.7
4/19/2017								17	
4/25/2017									
7/13/2017									4.2
10/10/2017	6.9	11	8.3	12	5.3	14	14	16	3.4
6/12/2018	6.7				5.1				4.6
6/13/2018		11	7	12		13	13	16	
10/9/2018	7.1				5.6				4.5
10/10/2018		10	6.9	12		14	14	15	
1/29/2019									
3/25/2019	6.8				4.7				3.4
3/26/2019		11	5.8	11		14	13	14	
9/10/2019	7	10	6	9.9	5.1	13	13	13	3.5
3/9/2020	7.4								4.5
3/10/2020		12	5.1	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	
8/2/2022	7.4		2.6		3.5				3.4
8/3/2022				11		13	13		
8/4/2022		13						12	
2/7/2023	7		3.1		4.7	11			4.2
2/8/2023		13		11			12	11	

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/7/2023 4:02 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		
2/7/2023	4.2	3.2
2/8/2023		

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/7/2023 4:02 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-1	MGWC-3	MGWC-2	MGWA-11 (bg)
5/5/2016	0.046 (J)	0.091 (J)	0.103 (J)	0.132 (J)	0.394				
5/6/2016						0.28 (J)	0.086 (J)	0.088 (J)	
6/20/2016	<0.1			0.05 (J)					0.06 (J)
6/21/2016		0.08 (J)	0.1 (J)		0.49	0.36	0.23 (J)	0.19 (J)	
8/15/2016	<0.1	<0.1	0.11 (J)	0.1 (J)	0.44				0.1 (J)
8/16/2016						0.27	<0.1	0.087 (J)	
9/28/2016	<0.1	0.084 (J)	0.1 (J)	0.11 (J)	0.4	0.26			0.097 (J)
9/29/2016							0.082 (J)	<0.1	
11/16/2016	<0.1	0.084 (J)	0.091 (J)	0.093 (J)	0.36	0.24	0.087 (J)	<0.1	0.12 (J)
1/16/2017	<0.1								
1/17/2017		0.099 (J)	<0.1	0.095 (J)	0.2		0.086 (J)		0.11 (J)
1/18/2017								<0.1	
1/19/2017						0.22			
3/2/2017	0.12 (J)	0.15 (J)	0.16 (J)	0.16 (J)	0.36	0.27	0.15 (J)	0.15 (J)	0.18 (J)
4/18/2017	<0.1	<0.1	<0.1	<0.1	0.29	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	<0.1	<0.1	<0.1	0.28	0.18 (J)	<0.1	<0.1	0.086 (J)
3/29/2018	<0.1	<0.1		0.084 (J)	0.23	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		<0.1	0.15 (J)		0.2	0.14 (J)	<0.1	<0.1	
10/9/2018	<0.1			0.086 (J)					0.16 (J)
10/10/2018		<0.1	0.11 (J)		0.23	0.17 (J)	<0.1	0.085 (J)	
1/29/2019									
3/25/2019	<0.1			0.072 (J)					0.087 (J)
3/26/2019		0.065 (J)	0.088 (J)		0.19 (J)	0.16	0.072 (J)	0.076 (J)	
9/10/2019	0.044 (J)	0.076 (J)	0.083 (J)	0.068 (J)	0.15	0.098 (J)	0.073 (J)	0.07 (J)	0.075 (J)
3/9/2020	0.061 (J)								0.19
3/10/2020		0.045 (J)	0.084 (J)	0.055 (J)	0.18	0.086 (J)	0.058 (J)	0.05 (J)	
9/16/2020	0.042 (J)	0.076 (J)		0.08 (J)				0.076 (J)	0.18
9/17/2020			0.11		0.25	0.15	0.083 (J)		
3/23/2021	0.038 (J)	0.082 (J)							0.081 (J)
3/24/2021			0.11	0.091 (J)	0.35	0.27	0.092 (J)	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	0.034 (J)		<0.1		0.047 (J)			<0.1
2/23/2022			0.05 (J)		0.22		0.086 (J)	0.075 (J)	
8/2/2022	<0.1	0.055 (J)		0.066 (J)					0.065 (J)
8/3/2022					0.2	0.12	0.079 (J)		
8/4/2022			0.087 (J)					0.072 (J)	
2/7/2023	<0.1	0.06 (J)		0.069 (J)			0.076 (J)		0.07 (J)
2/8/2023			0.084 (J)		0.14	0.11		0.074 (J)	

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/7/2023 4:02 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		
2/7/2023	0.25	0.064 (J)
2/8/2023		

# Prediction Limit

Constituent: pH (SU) Analysis Run 3/7/2023 4:02 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-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	5.94	5.96	7.81	7.4	7.13				
5/6/2016						7.41	6.64	6.85	
6/20/2016	5.84 (D)			7.63					7.82
6/21/2016		6	7.2		7.25	7.41	6.99	6.98	
8/15/2016	5.65	5.26	7.04	7.54	7.04				7.52
8/16/2016						7.33	6.48	6.73	
9/28/2016	5.72	5.66	7	7.45	7.09		6.7		7.66
9/29/2016						7.42		6.81	
11/16/2016	5.65	5.33	6.73	7.39	7.6	7.87	6.66	6.69	7.51
1/16/2017	5.52								
1/17/2017		5.24	6.61	7.23	6.99			6.77	7.52
1/18/2017						7.49			
1/19/2017							6.81		
3/2/2017	5.53	5.21	6.62	7.55	6.95	7.37	6.75	6.79	7.5
4/18/2017	5.64	5.85	6.7	7.43	7.02		6.93	6.77	7.75
4/19/2017						7.48			
4/25/2017									
7/13/2017									7.72
10/10/2017		5.6	6.48	5.62	7.27	7.29	6.99	7	
10/11/2017	6.11								6.35
3/29/2018	5.35		6.46	7.19	6.95		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		5.79	6.24		7.08	7.37	7.01	6.83	
10/9/2018	5.62 (D)			7.8 (D)					7.79 (D)
10/10/2018		5.15 (D)	6.12 (D)		7.01 (D)	7.41 (D)	7.04 (D)	6.69 (D)	
1/28/2019	5.49 (D)								7.4 (D)
1/29/2019		5.46 (D)	5.93 (D)	7.63 (D)	6.55 (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		7.14 (D)	5.19 (D)		6.57 (D)	6.68 (D)	7.01 (D)	5.96 (D)	
9/10/2019	5.97	5.1	6.03	7.41	6.99	7.26	7.09	6.67	7.54
1/28/2020	5.78		6.61	7.46	7.17				7.4
1/29/2020		5.76				7.3	7.19	6.68	
3/9/2020	5.46								7.58
3/10/2020		5.5	6.54	7.3	7	7.3	7.11	6.87	
9/16/2020	6.37			7.38	6.98	7.16			7.89
9/17/2020		5.22	6.39				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		6.71	6.26	6.88		7.24	7.14	6.73	
8/23/2021	6.16								8.12
8/24/2021				7.78	7.11	7.42		6.92	
8/25/2021		5.26	6.85				7.27		
10/26/2021		5.99							
2/22/2022	5.38			7.57	7.14		7.32		7.6
2/23/2022		6.22	6.91			7.44		6.98	
8/2/2022	5.41			7.45	7.1				7.57
8/3/2022			6.86				7.23	6.91	
8/4/2022		6.5				7.37			
2/7/2023	5.46			7.85	7.13			7.01	7.72
2/8/2023		6.76	7.43			7.44	7.28		



# Prediction Limit

Constituent: pH (SU) Analysis Run 3/7/2023 4:02 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		
2/7/2023	6.95	7.24
2/8/2023		

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/7/2023 4:02 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	2.46	144	17.8	116	4.47				
5/6/2016						94.2	106	445	
6/20/2016	2.5				7.7				1
6/21/2016		160	17	170		95	210	290	
8/15/2016	1.9	120	20	170	7.5				0.73 (J)
8/16/2016						88	120	270	
9/28/2016	1.9	130	21	170	7.8		110		<1
9/29/2016						94		280	
11/16/2016	1.7	130	20	170	6.7	97	130	280	<1
1/16/2017	<1								
1/17/2017		150	19	180	6.7	100			<1
1/18/2017								280	
1/19/2017							160		
3/2/2017	1.4	160	15	180	5.6	100	130	240	<1
4/18/2017	1.3	180	14	160	5.1	91	120		<1
4/19/2017								250	
4/25/2017									
7/13/2017									1.4
10/10/2017	1.1	260	11	180	4.9	110	170	240	0.87 (J)
6/12/2018	0.82 (J)				3.8				4.1
6/13/2018		330	8.7	180		110	130	220	
10/9/2018	0.82 (J)				6.7				2.2
10/10/2018		410	8.7	190		110	140	220	
1/29/2019									
3/25/2019	<1				3.4 (J)				<1
3/26/2019		420	6.3 (J)	180		110	130	190	
9/10/2019	1.1	420	5.6	180	4.7	110	140	180	1.8
3/9/2020	4.2								3.4
3/10/2020		370	5	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	
8/2/2022	<1		2.3		2.7				0.8 (J)
8/3/2022				220		130	140		
8/4/2022		350						150	
2/7/2023	<1		2.3		2.5	120			3.3
2/8/2023		280		220			140	150	

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/7/2023 4:02 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		
2/7/2023	4.7	1.6
2/8/2023		

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 3/7/2023 4:02 PM View: Appendix III

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-3	MGWC-1	MGWC-2	MGWA-11 (bg)
5/5/2016	78	287	281	272	129				
5/6/2016						380	282	661	
6/20/2016	80				156				188
6/21/2016		297	303	356		392	516	692	
8/15/2016	58	230	310	330	160				180
8/16/2016						360	360	650	
9/28/2016	29	130	170	180	91		190		100
9/29/2016						380		640	
11/16/2016	140	290	340	330	250	420	410	680	270
1/16/2017	36								
1/17/2017		240	310	310	140	380			170
1/18/2017								630	
1/19/2017							400		
3/2/2017	78	270	330	340	170	410	360	660	210
4/18/2017	16	310	290	300	140	360	360		160
4/19/2017								600	
4/25/2017									
7/13/2017									150
10/10/2017	78	450	310	340	190	400	480	600	210
6/12/2018	62				180				150
6/13/2018		600	230	320		320	390	570	
10/9/2018	68				170				150
10/10/2018		410	300	270		300	260	470	
1/29/2019									
3/25/2019	54				150				210
3/26/2019		630	290	320		370	370	530	
9/10/2019	14	660	260	260	110	360	360	470	160
3/9/2020	56								190
3/10/2020		600	300	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	
8/2/2022	65		200		270				210
8/3/2022				400		430	440		
8/4/2022		620						480	
2/7/2023	61		290		150	410			190
2/8/2023		480		370			400	440	

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 3/7/2023 4:02 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	100 (D)
8/3/2022		
8/4/2022		
2/7/2023	190	260
2/8/2023		

FIGURE E.

# Appendix III Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/7/2023, 4:13 PM

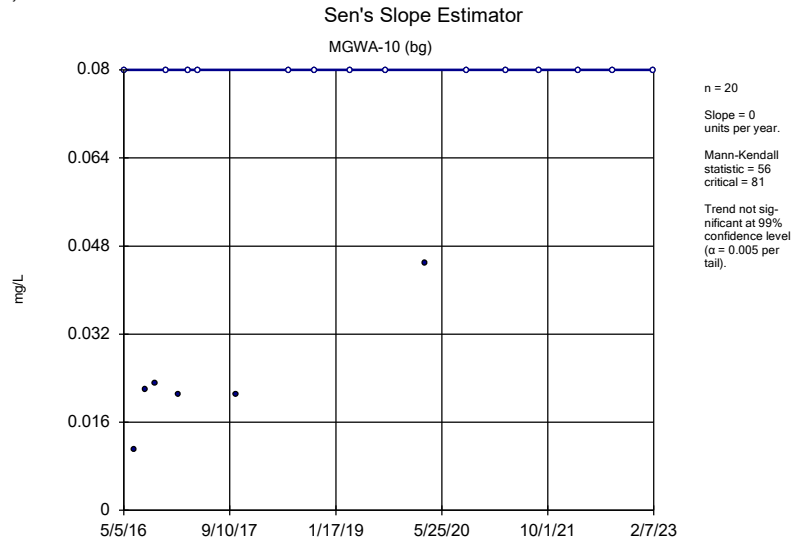
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-6 (bg)	-0.01886	-132	-81	Yes	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.272	-138	-81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.09682	143	81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.578	85	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.2156	-111	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.138	-164	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.4011	-37	-30	Yes	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.562	-162	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.5888	-126	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.4104	97	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.1405	-90	-81	Yes	20	35	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.6815	-128	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-2.922	-155	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-23.35	-162	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	6.754	138	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-7	6.288	88	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	42.97	106	81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-33.46	-142	-81	Yes	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	68.04	110	81	Yes	20	0	n/a	n/a	0.01	NP

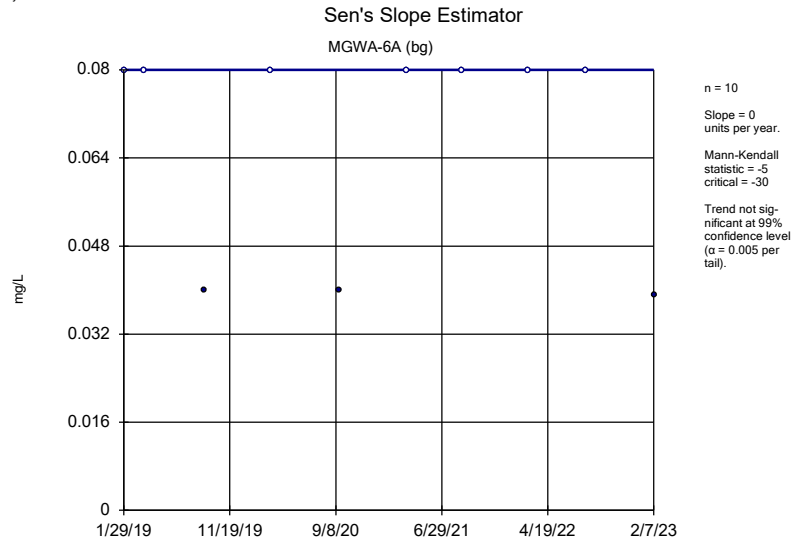
# Appendix III Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/7/2023, 4:13 PM

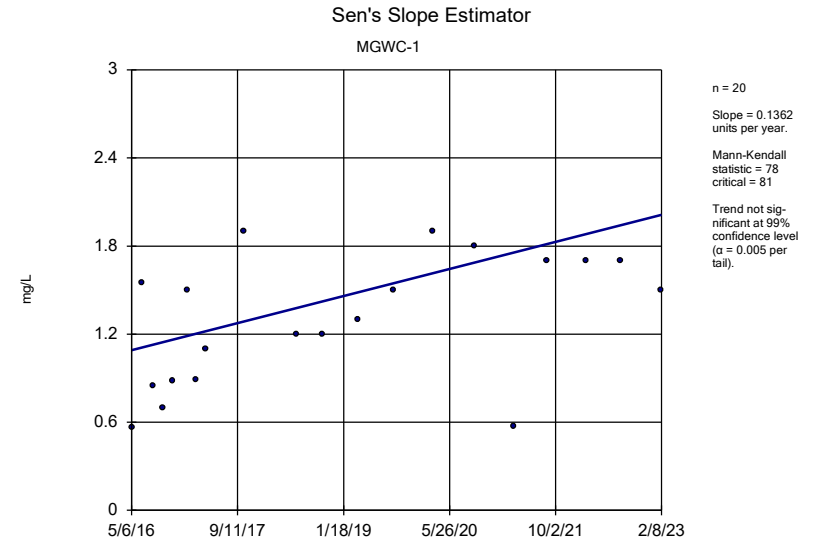
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	56	81	No	20	70	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	14	81	No	20	60	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	14	81	No	20	85	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-0.01886</b>	<b>-132</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>20</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MGWA-6A (bg)	0	-5	-30	No	10	70	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1362	78	81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-2</b>	<b>-0.272</b>	<b>-138</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>
Boron (mg/L)	MGWC-3	-0.02947	-29	-81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>MGWC-7</b>	<b>0.09682</b>	<b>143</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>Boron (mg/L)</b>	<b>MGWC-8</b>	<b>0.578</b>	<b>85</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>
Chloride (mg/L)	MGWA-10 (bg)	0	5	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.02923	-17	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.2156</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>
<b>Chloride (mg/L)</b>	<b>MGWA-6 (bg)</b>	<b>-1.138</b>	<b>-164</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>Chloride (mg/L)</b>	<b>MGWA-6A (bg)</b>	<b>-0.4011</b>	<b>-37</b>	<b>-30</b>	<b>Yes</b>	<b>10</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	-52	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-2</b>	<b>-1.562</b>	<b>-162</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>
Chloride (mg/L)	MGWC-3	0	36	81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>MGWC-7</b>	<b>-0.5888</b>	<b>-126</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>Chloride (mg/L)</b>	<b>MGWC-8</b>	<b>0.4104</b>	<b>97</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>
Fluoride (mg/L)	MGWA-10 (bg)	0	-37	-87	No	21	66.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	-0.00351	-19	-87	No	21	9.524	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.004835	-65	-87	No	21	19.05	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.005254	-61	-87	No	21	28.57	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0	1	30	No	10	20	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-12	-0.01405	-67	-87	No	21	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-10 (bg)</b>	<b>-0.1405</b>	<b>-90</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>35</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	MGWA-11 (bg)	0.187	59	81	No	20	30	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWA-5 (bg)</b>	<b>-0.6815</b>	<b>-128</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-6 (bg)</b>	<b>-2.922</b>	<b>-155</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>
Sulfate (mg/L)	MGWA-6A (bg)	-0.05159	-4	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	2.916	47	81	No	20	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MGWC-2</b>	<b>-23.35</b>	<b>-162</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>MGWC-3</b>	<b>6.754</b>	<b>138</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>MGWC-7</b>	<b>6.288</b>	<b>88</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>MGWC-8</b>	<b>42.97</b>	<b>106</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>
TDS (mg/L)	MGWA-10 (bg)	-2.862	-41	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	2.39	26	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	1.211	17	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	-1.884	-35	-81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	-3.259	-4	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	10.77	45	81	No	20	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-2</b>	<b>-33.46</b>	<b>-142</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>
TDS (mg/L)	MGWC-3	7.635	59	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	11.09	65	81	No	20	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>MGWC-8</b>	<b>68.04</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>



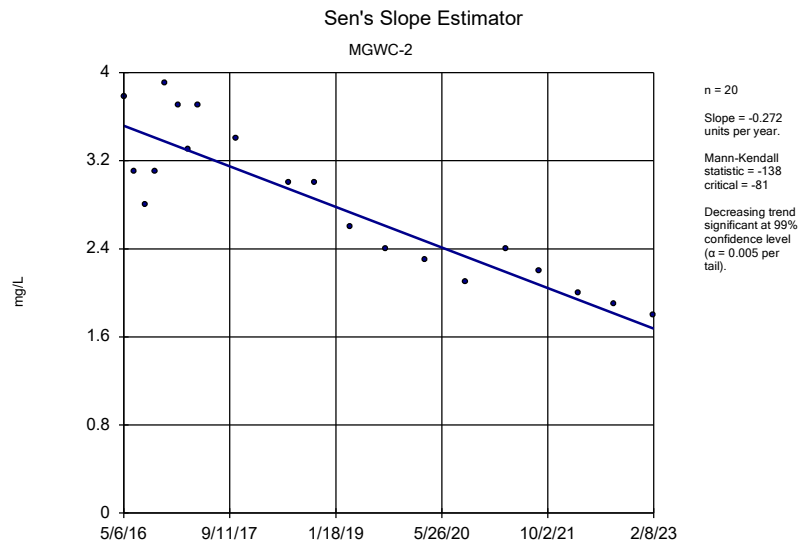




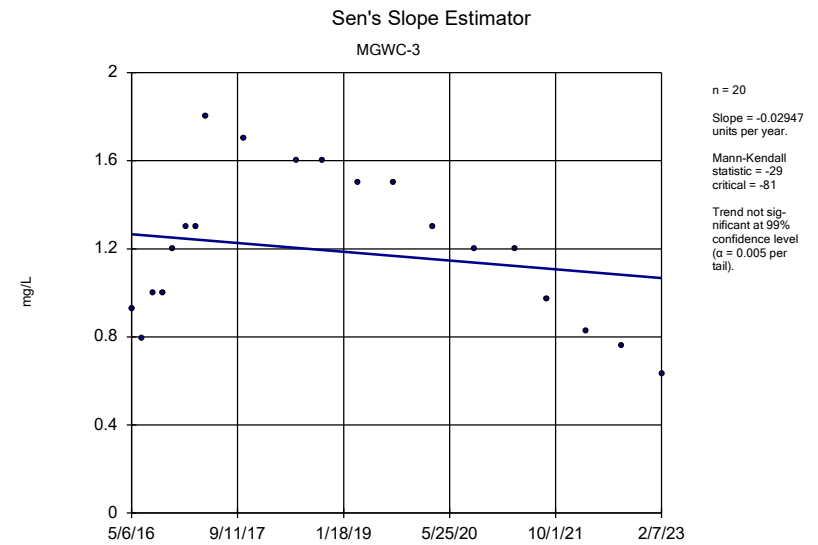
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Boron Analysis Run 3/7/2023 4:07 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



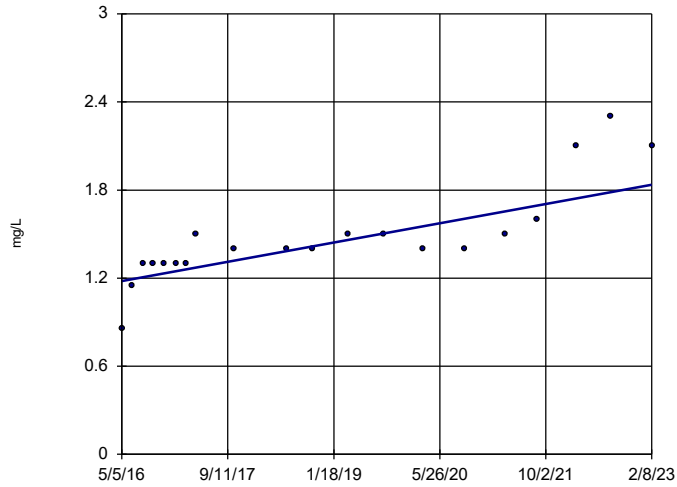
Constituent: Boron Analysis Run 3/7/2023 4:07 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



Constituent: Boron Analysis Run 3/7/2023 4:07 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

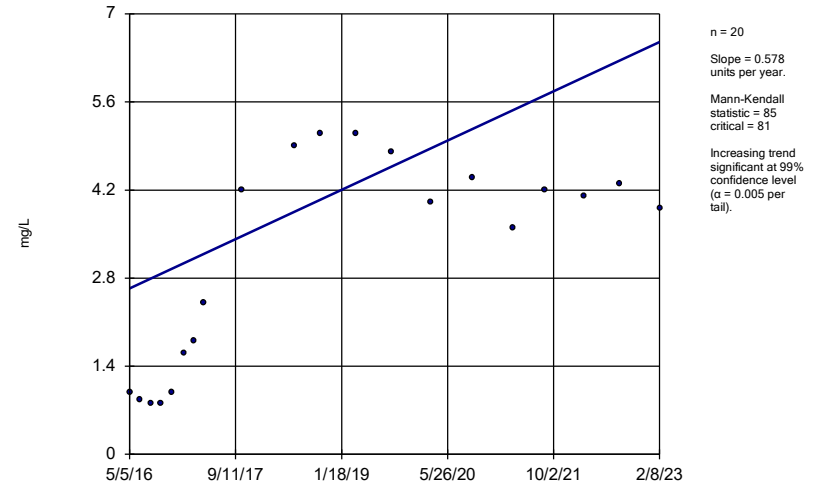
MGWC-7



Constituent: Boron Analysis Run 3/7/2023 4:07 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

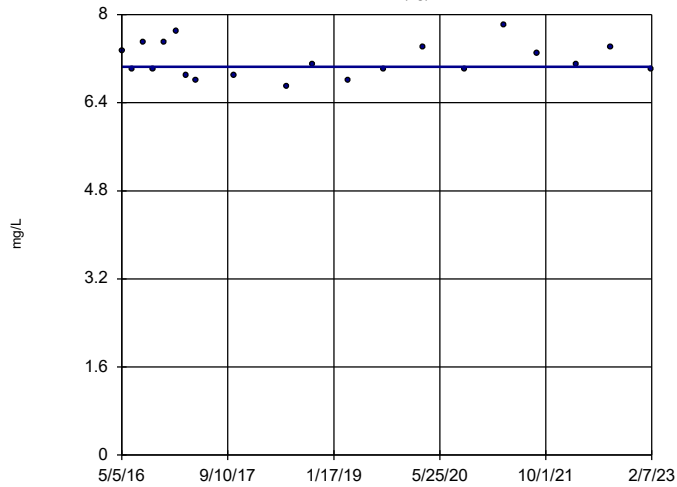
MGWC-8



Constituent: Boron Analysis Run 3/7/2023 4:07 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

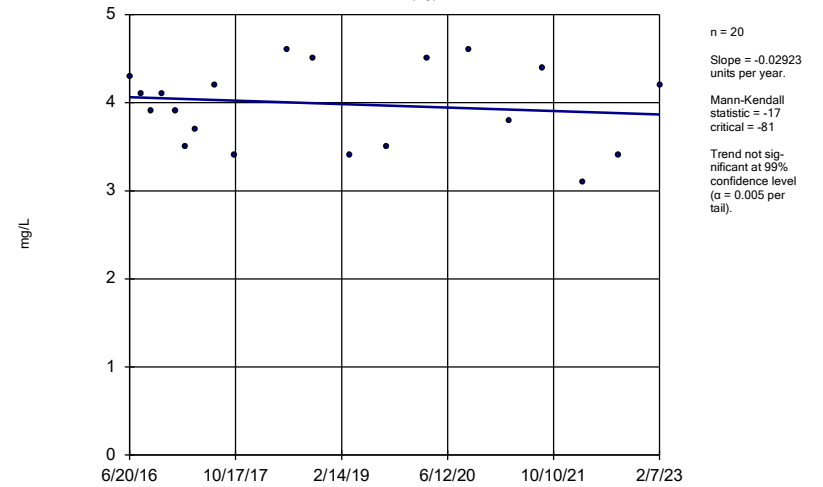
MGWA-10 (bg)



Constituent: Chloride Analysis Run 3/7/2023 4:07 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

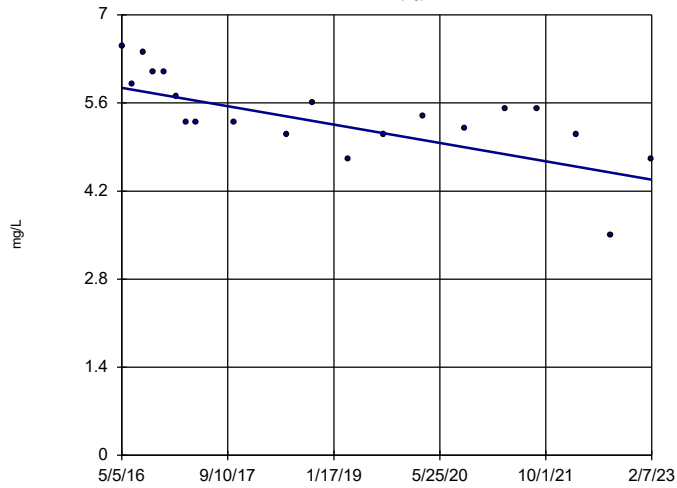
MGWA-11 (bg)



Constituent: Chloride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-5 (bg)

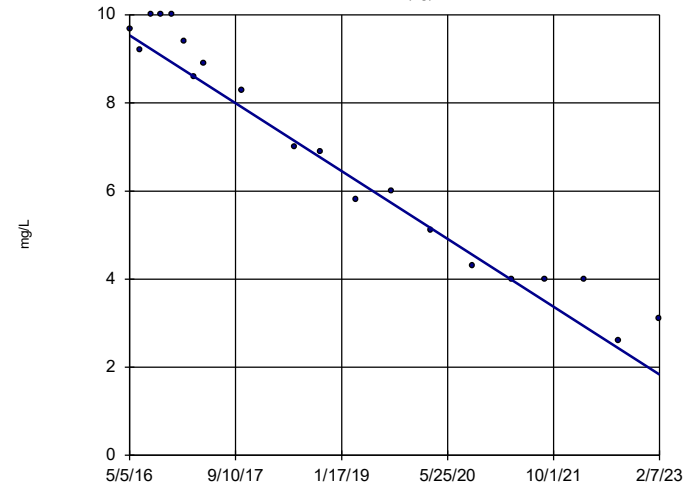


n = 20  
 Slope = -0.2156 units per year.  
 Mann-Kendall statistic = -111  
 critical = -81  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

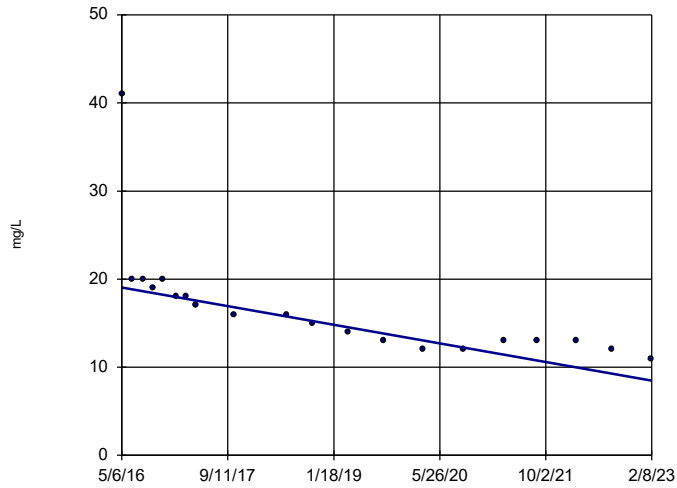
### Sen's Slope Estimator

MGWA-6 (bg)



### Sen's Slope Estimator

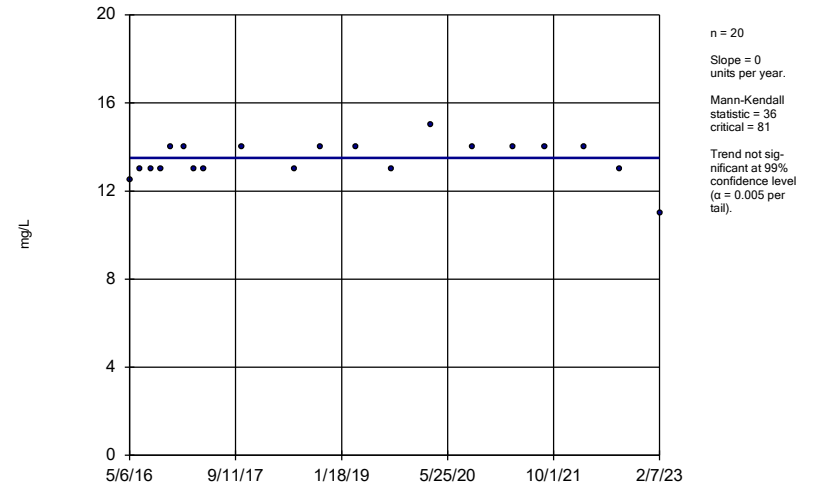
MGWC-2



Constituent: Chloride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

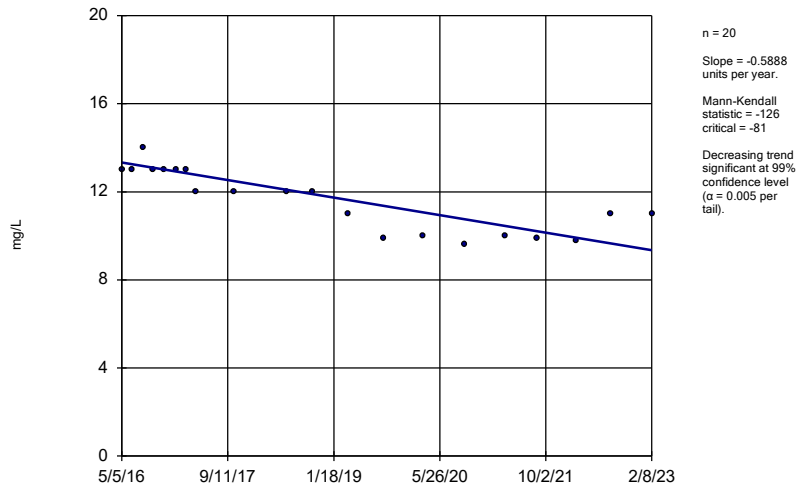
MGWC-3



Constituent: Chloride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

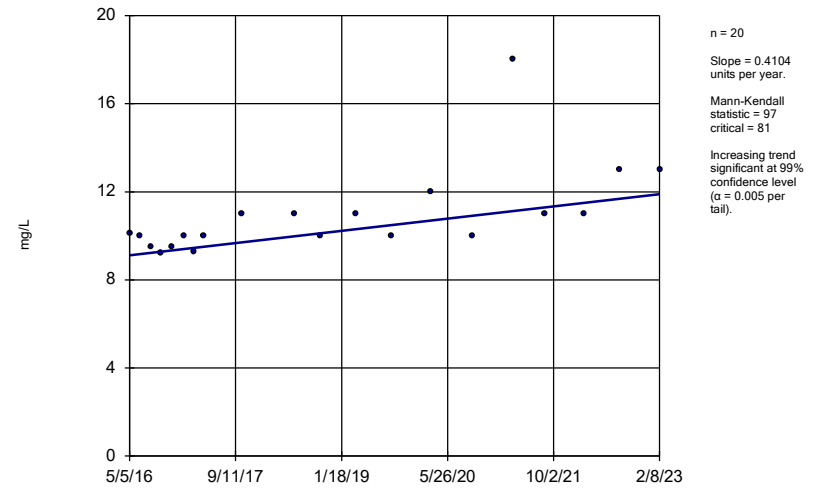
MGWC-7



Constituent: Chloride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

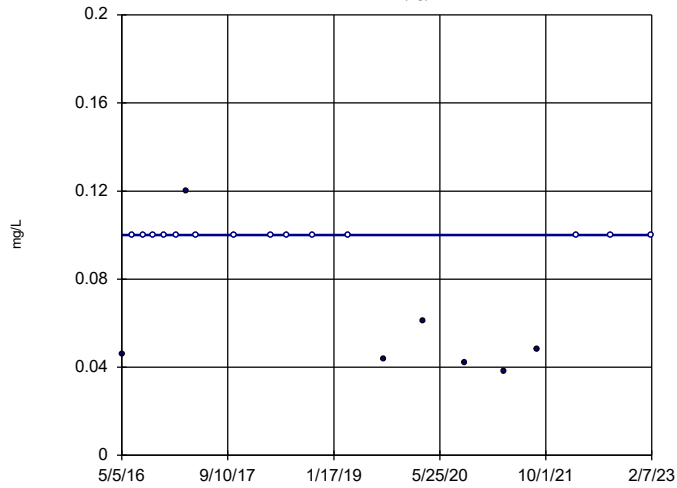
MGWC-8



Constituent: Chloride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-10 (bg)

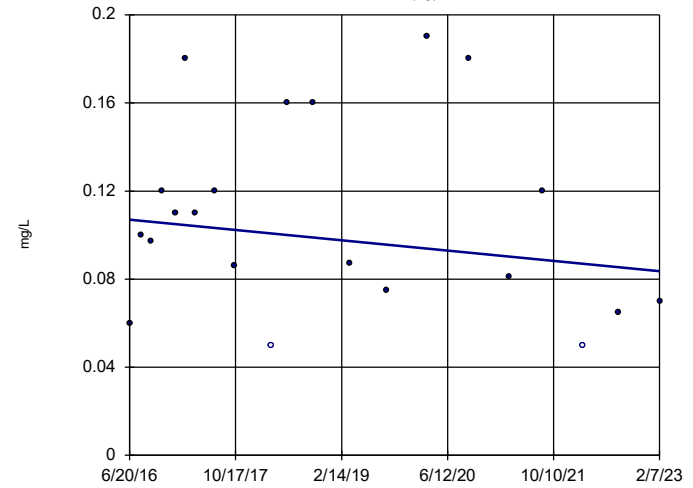


n = 21  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = -37  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-11 (bg)

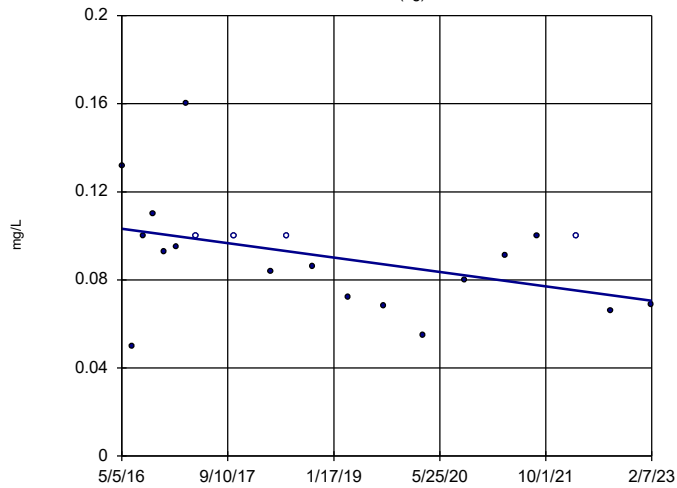


n = 21  
Slope = -0.00351  
units per year.  
Mann-Kendall  
statistic = -19  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-5 (bg)

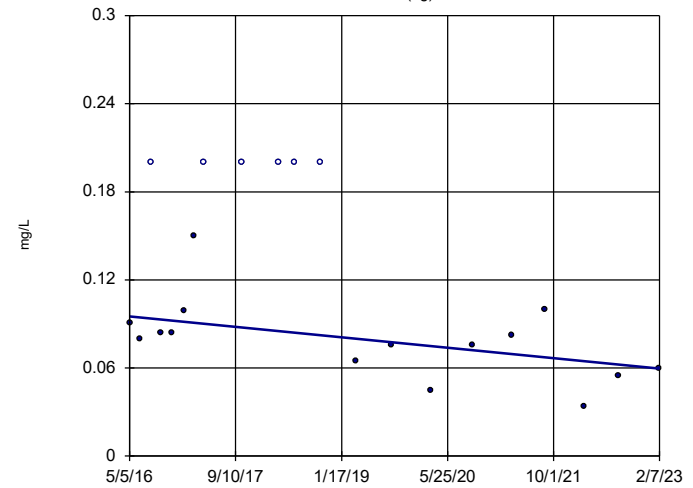


n = 21  
Slope = -0.004835  
units per year.  
Mann-Kendall  
statistic = -65  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6 (bg)



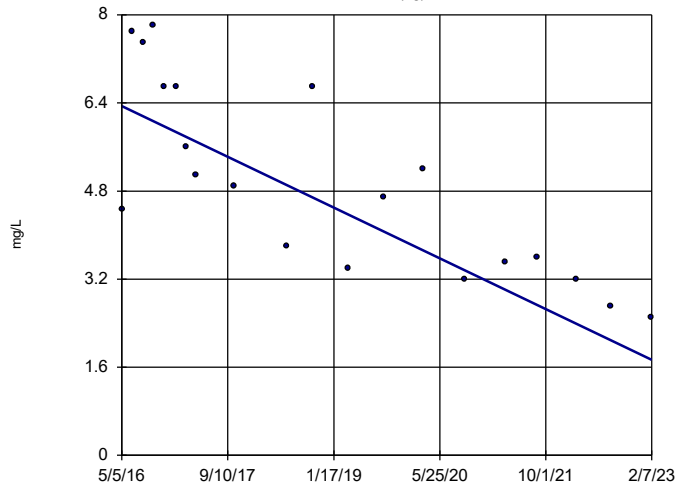
n = 21  
Slope = -0.005254  
units per year.  
Mann-Kendall  
statistic = -61  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

MGWA-5 (bg)

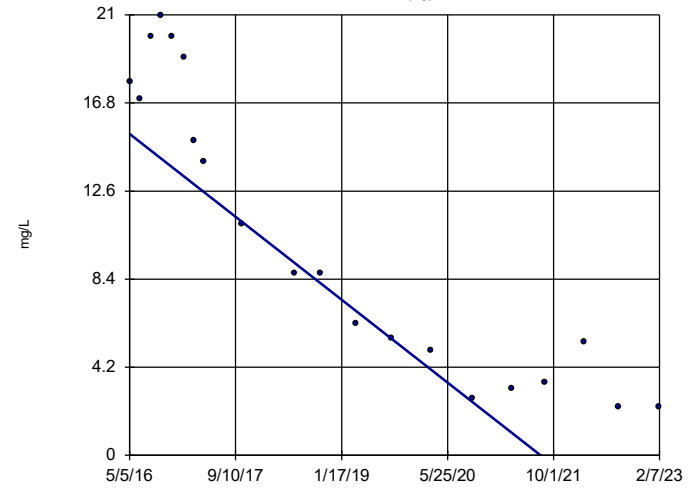


n = 20  
 Slope = -0.6815  
 units per year.  
 Mann-Kendall  
 statistic = -128  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6 (bg)

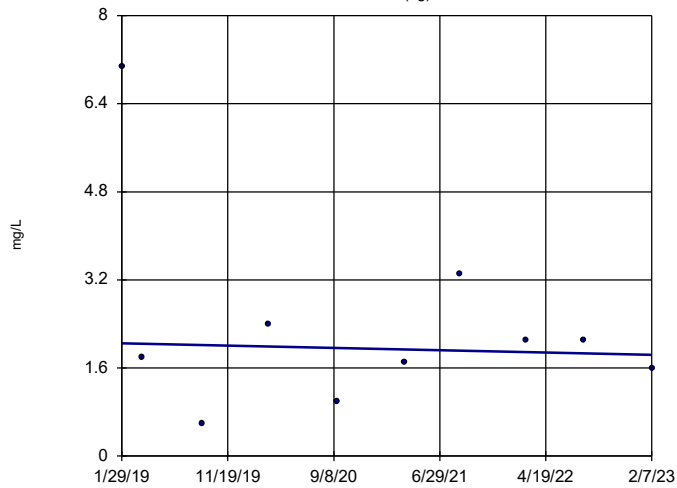


n = 20  
 Slope = -2.922  
 units per year.  
 Mann-Kendall  
 statistic = -155  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6A (bg)

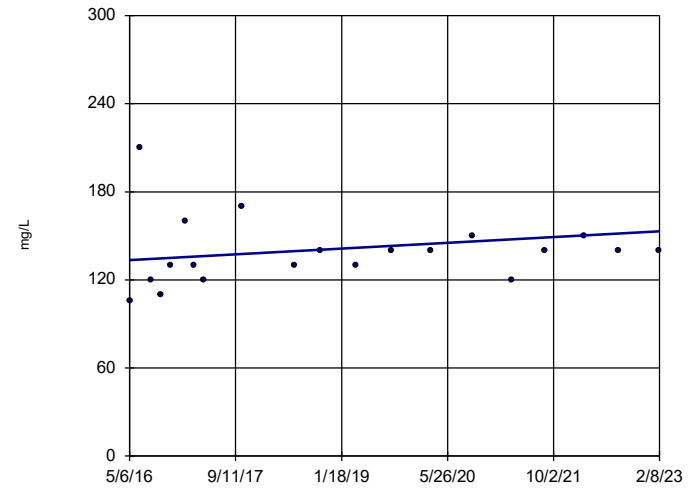


n = 10  
 Slope = -0.05159  
 units per year.  
 Mann-Kendall  
 statistic = -4  
 critical = -30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWC-1



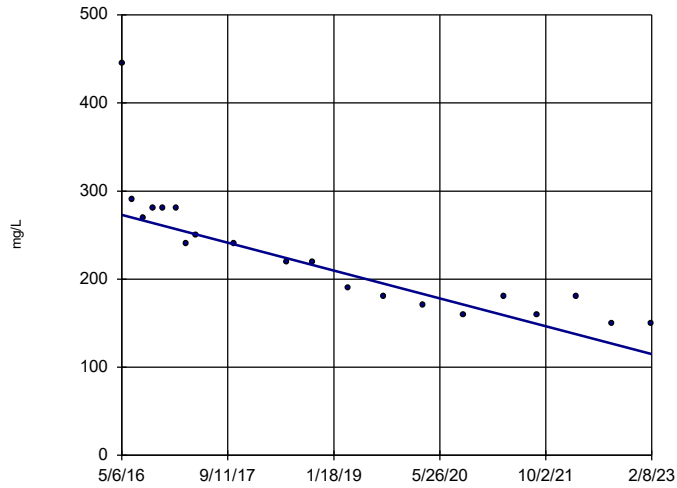
n = 20  
 Slope = 2.916  
 units per year.  
 Mann-Kendall  
 statistic = 47  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

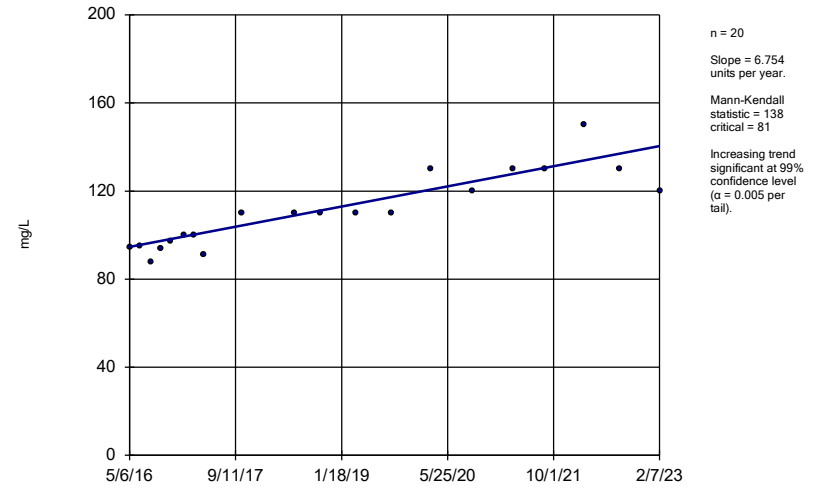
MGWC-2



Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

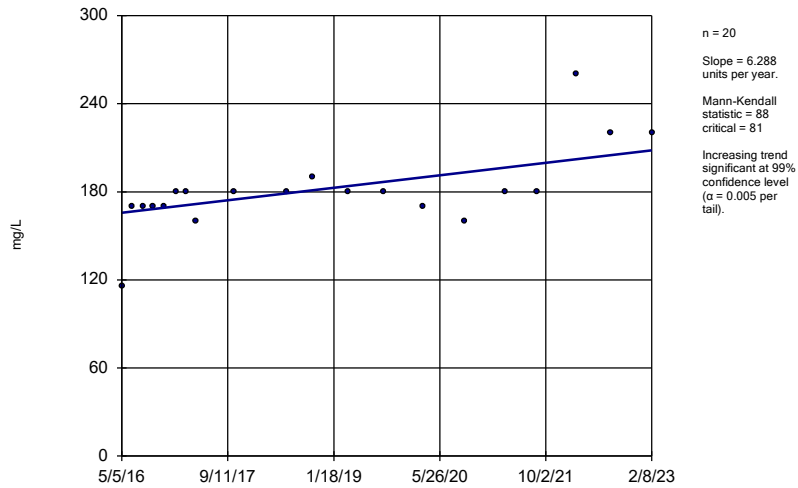
MGWC-3



Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

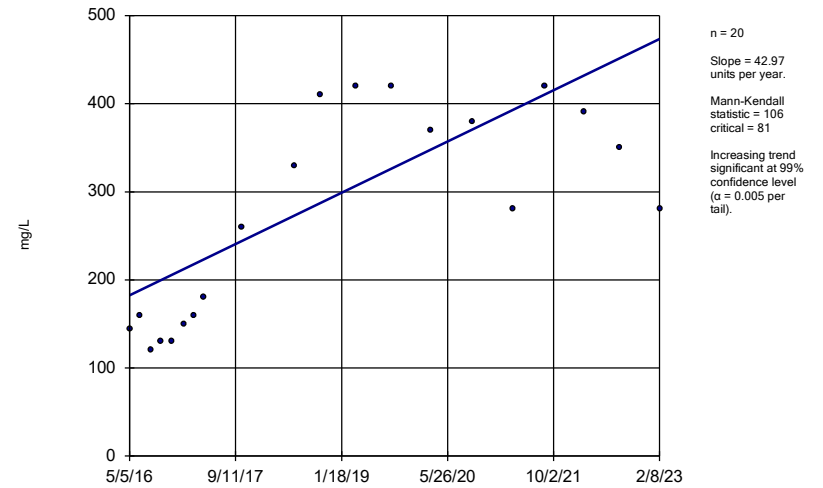
MGWC-7



Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

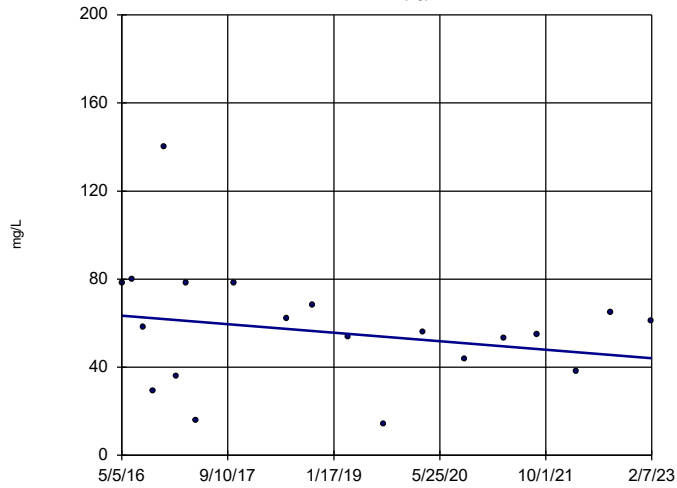
MGWC-8



Constituent: Sulfate Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

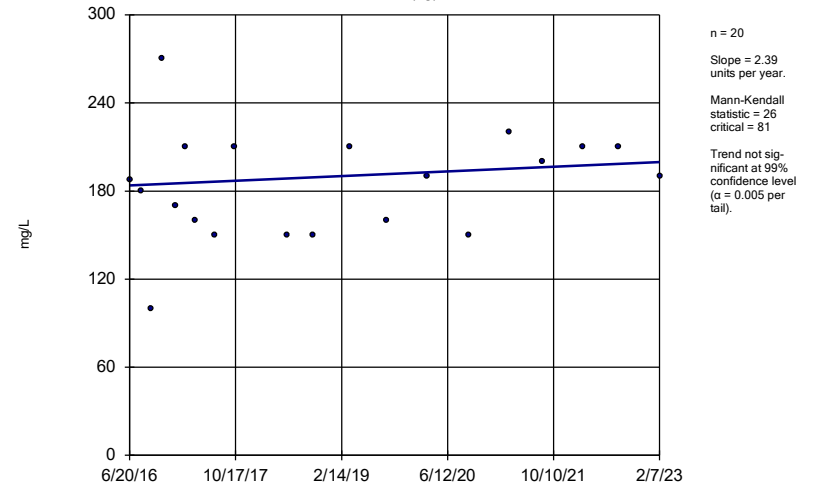
MGWA-10 (bg)



Constituent: TDS Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

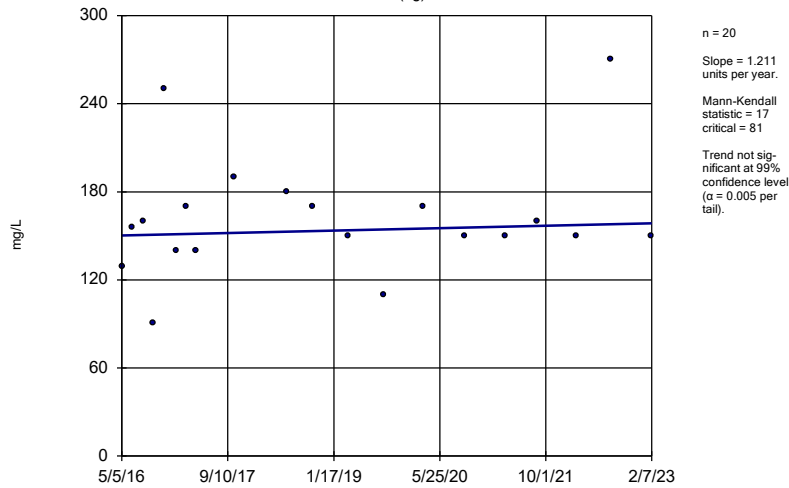
MGWA-11 (bg)



Constituent: TDS Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

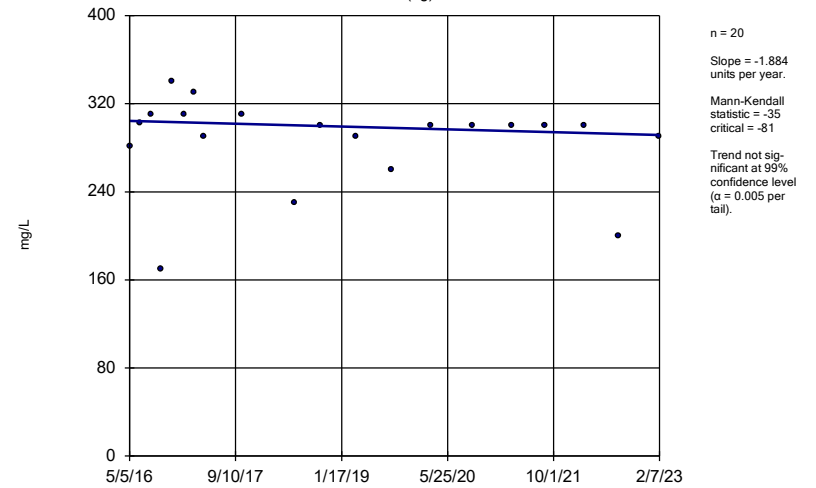
MGWA-5 (bg)



Constituent: TDS Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6 (bg)

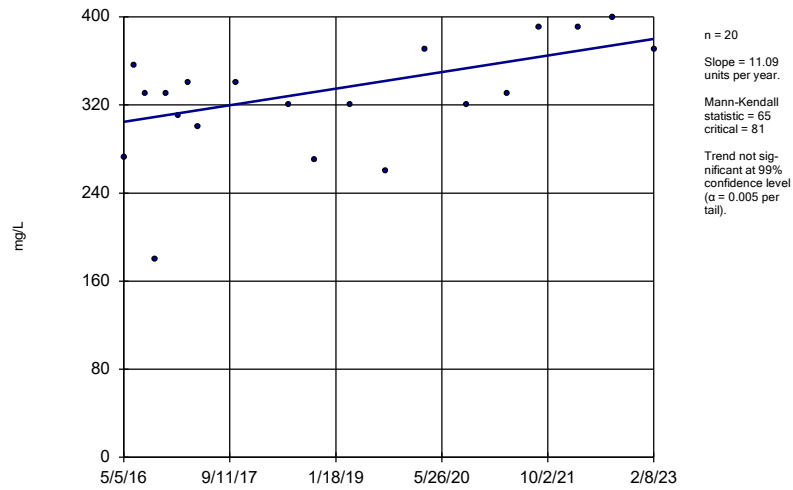


Constituent: TDS Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

MGWC-7



Constituent: TDS Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWC-8

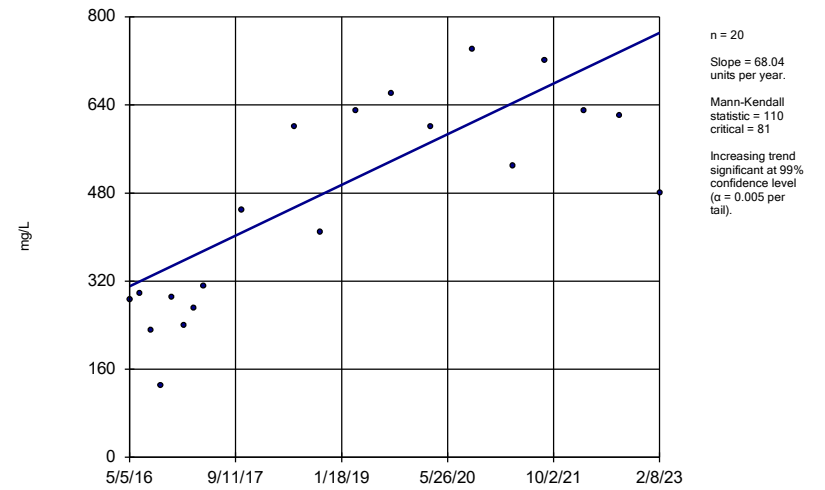


FIGURE F.

# Upper Tolerance Limits Summary Table

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/23/2023, 8:49 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	81	91.36	n/a	0.01569	NP Inter(NDs)
Arsenic (mg/L)	0.014	n/a	n/a	n/a	n/a	91	36.26	n/a	0.009394	NP Inter(normality)
Barium (mg/L)	0.13	n/a	n/a	n/a	n/a	99	0	n/a	0.006232	NP Inter(normality)
Beryllium (mg/L)	0.0025	n/a	n/a	n/a	n/a	89	94.38	n/a	0.01041	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	n/a	n/a	99	98.99	n/a	0.006232	NP Inter(NDs)
Chromium (mg/L)	0.0063	n/a	n/a	n/a	n/a	89	71.91	n/a	0.01041	NP Inter(NDs)
Cobalt (mg/L)	0.0025	n/a	n/a	n/a	n/a	98	72.45	n/a	0.00656	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.128	n/a	n/a	n/a	n/a	100	0	No	0.05	Inter
Fluoride (mg/L)	0.19	n/a	n/a	n/a	n/a	94	29.79	n/a	0.008054	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	81	93.83	n/a	0.01569	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	99	30.3	n/a	0.006232	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	89	96.63	n/a	0.01041	NP Inter(NDs)
Molybdenum (mg/L)	0.015	n/a	n/a	n/a	n/a	89	62.92	n/a	0.01041	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	69	91.3	n/a	0.02904	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	89	83.15	n/a	0.01041	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 3/23/2023, 12:13 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>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-7	0.009822	0.007005	0.006	Yes	22	0.002624	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01566	0.007296	0.006	Yes	22	0.007789	0	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	22	0.01965	0	No	0.01	NP (normality)

# Confidence Intervals - All Results

Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond    Printed 3/23/2023, 12:13 AM

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	18	0.0003884	88.89	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	18	0.0004007	94.44	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	18	0.0003509	88.89	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002785	0.00192	0.014	No	22	0.0008054	0	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001076	0.0006626	0.014	No	22	0.0003659	27.27	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	22	0.0001986	81.82	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.0017	0.00143	0.014	No	22	0.0003425	4.545	No	0.01	NP (normality)
Arsenic (mg/L)	MGWC-7	0.0008144	0.0005167	0.014	No	22	0.000281	36.36	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00099	0.014	No	22	0.000195	68.18	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	22	0.01606	0	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06494	0.05014	2	No	22	0.01378	0	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.05376	0.04819	2	No	22	0.005188	0	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.1553	0.1413	2	No	22	0.01302	0	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.015	0.01	2	No	22	0.006769	4.545	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.04016	0.03374	2	No	22	0.006254	0	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	20	0.0005188	95	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	20	0.0004897	95	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001658	0.0008074	0.004	No	20	0.0007486	15	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	22	0.0009893	77.27	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.002982	0.001229	0.005	No	22	0.001884	0	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00041	0.005	No	22	0.0006421	90.91	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.001423	0.0005973	0.005	No	22	0.001177	27.27	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.0014	0.1	No	20	0.0003887	90	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.0012	0.1	No	20	0.006042	85	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	20	0.0002907	95	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	20	0.0002236	95	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	20	0.0003768	85	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.0013	0.1	No	20	0.0002984	90	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.00047	0.006	No	22	0.001026	63.64	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	22	0.0005331	90.91	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.003228	0.002348	0.006	No	22	0.0008194	0	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	22	0.000478	13.64	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>MGWC-7</b>	<b>0.009822</b>	<b>0.007005</b>	<b>0.006</b>	<b>Yes</b>	<b>22</b>	<b>0.002624</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Cobalt (mg/L)</b>	<b>MGWC-8</b>	<b>0.01566</b>	<b>0.007296</b>	<b>0.006</b>	<b>Yes</b>	<b>22</b>	<b>0.007789</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.71	1.302	5	No	23	0.3905	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7626	0.462	5	No	22	0.28	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.7314	0.4682	5	No	22	0.2451	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.745	1.368	5	No	23	0.3608	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.327	0.9527	5	No	22	0.3488	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	1.952	1.389	5	No	22	0.524	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.2296	0.1406	4	No	21	0.08068	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.251	0.1966	4	No	21	0.05902	0	x^2	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.2	0.075	4	No	21	0.05953	33.33	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-3	0.2	0.079	4	No	21	0.05951	28.57	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3286	0.2146	4	No	21	0.1033	0	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.1073	0.07066	4	No	21	0.03324	14.29	No	0.01	Param.
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	18	0.0002121	94.44	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	18	0.0002947	83.33	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	18	0.0001838	94.44	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01225	0.01023	0.04	No	22	0.001875	4.545	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.02215	0.01652	0.04	No	22	0.00524	0	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.0066	0.0051	0.04	No	22	0.0042	4.545	No	0.01	NP (normality)
Lithium (mg/L)	MGWC-3	0.01343	0.01149	0.04	No	22	0.001808	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>22</b>	<b>0.01965</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	MGWC-8	0.03721	0.02552	0.04	No	22	0.01089	0	No	0.01	Param.
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.002	No	20	0.00003699	90	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.002	No	20	0.00003435	90	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.002	No	20	0.00002907	95	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.002	No	20	0.00002683	95	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00026	0.00014	0.002	No	21	0.0008595	38.1	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0012	0.1	No	20	0.03016	20	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.002	0.1	No	20	0.00639	70	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	20	0.002569	95	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	20	0.002527	95	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	16	0.001125	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	16	0.001182	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	16	0.001137	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	16	0.00114	93.75	No	0.01	NP (NDs)

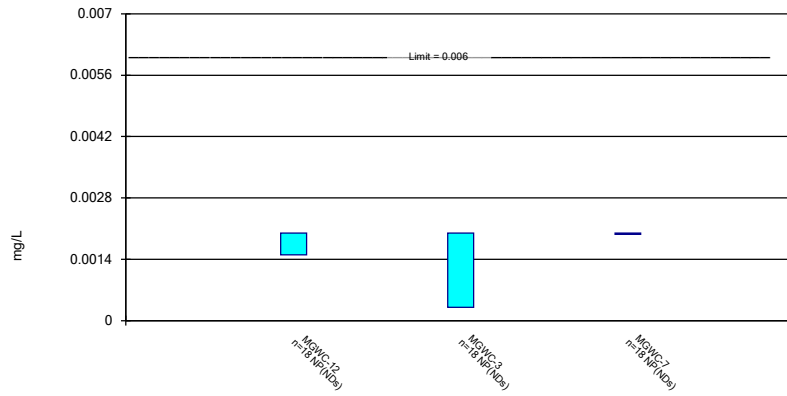
# Confidence Intervals - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/23/2023, 12:13 AM

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	16	0.001185	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.00038	0.05	No	16	0.001915	75	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00032	0.002	No	20	0.0003752	75	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	20	0.0002439	90	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	20	0.0001766	95	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	20	0.0002288	90	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.0002436	0.0001385	0.002	No	20	0.0003726	30	In(x)	0.01	Param.

### Non-Parametric Confidence Interval

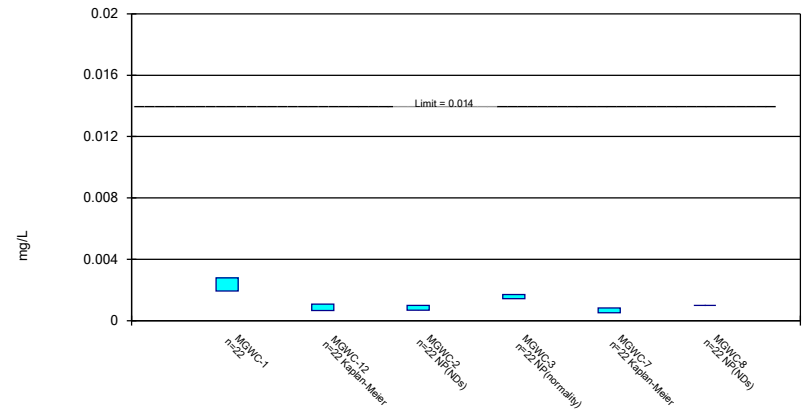
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

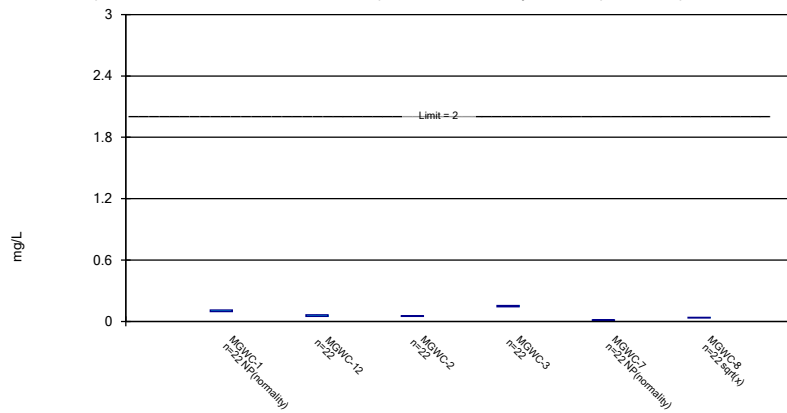
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

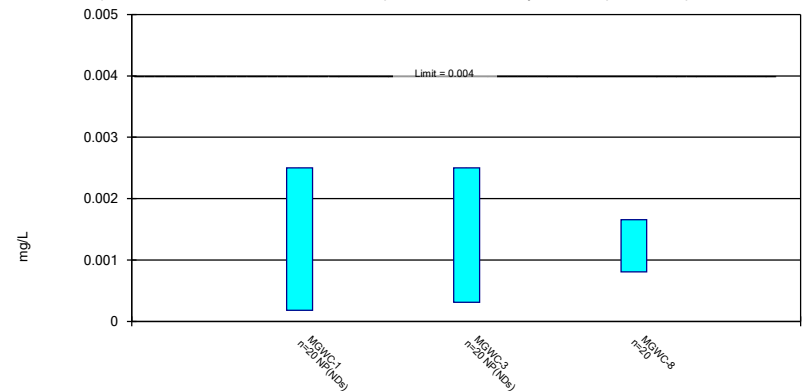
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

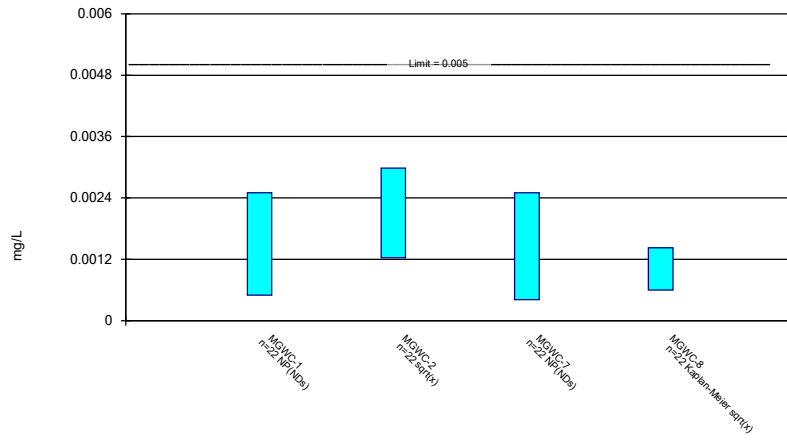
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

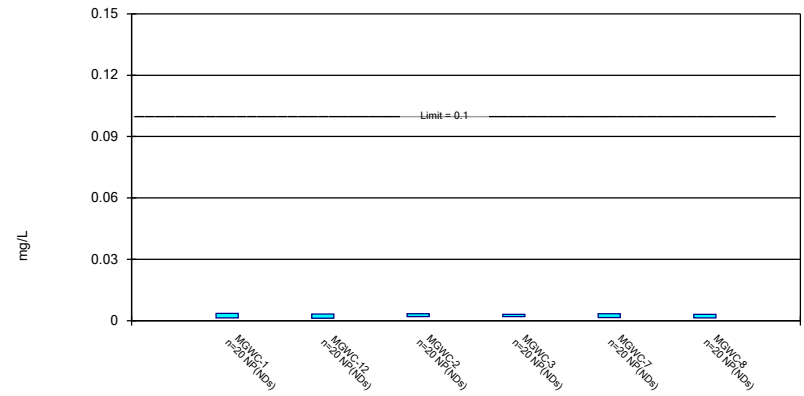
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

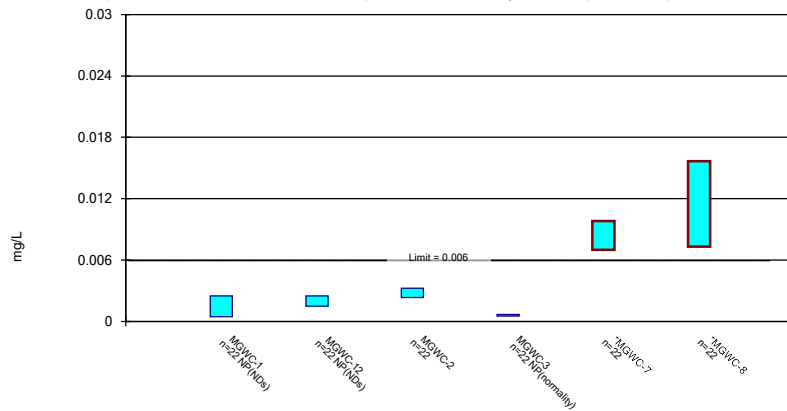
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

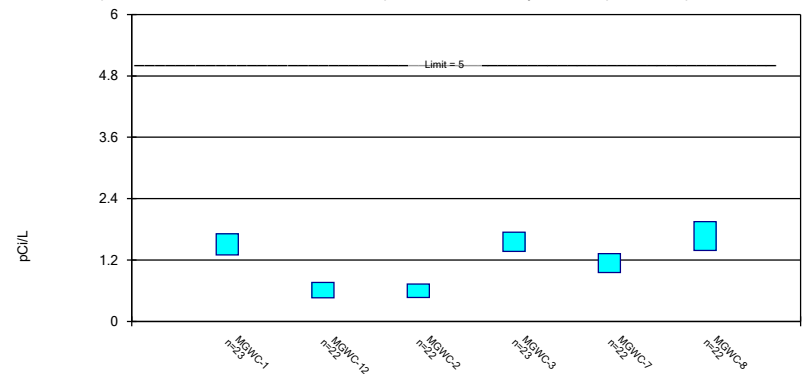
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric Confidence Interval

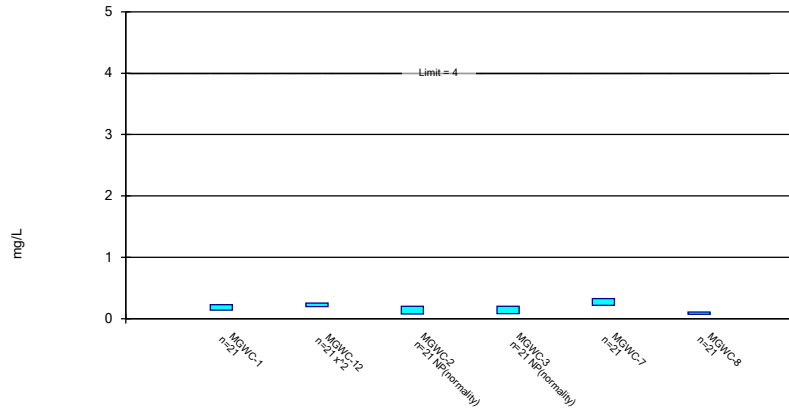
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

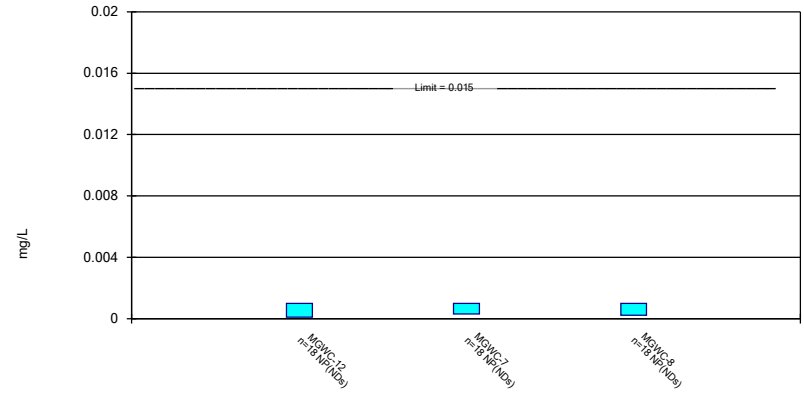
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

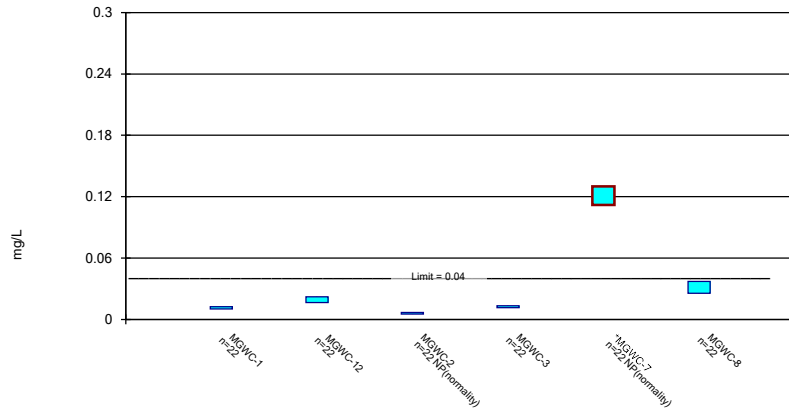
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

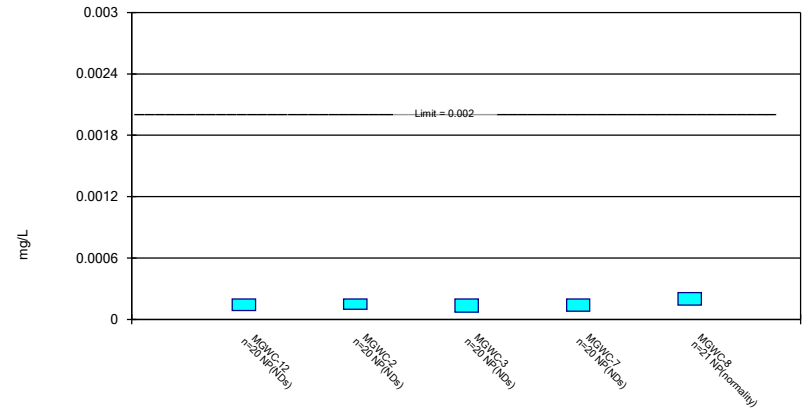
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

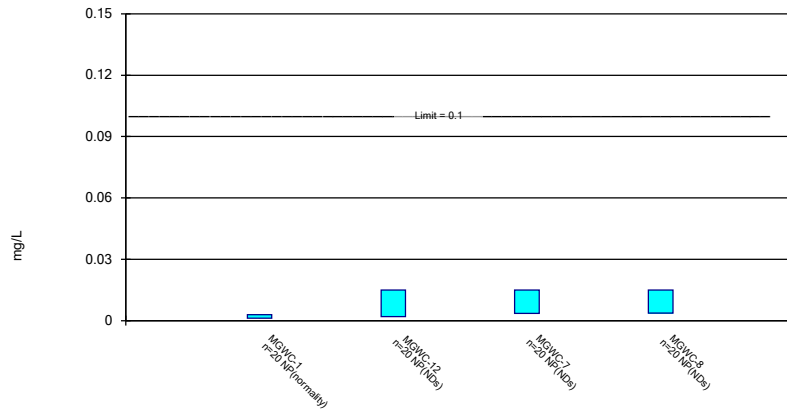
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

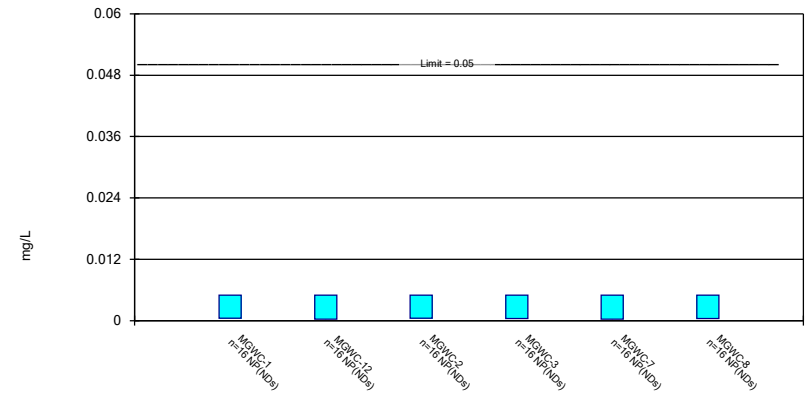
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Non-Parametric Confidence Interval

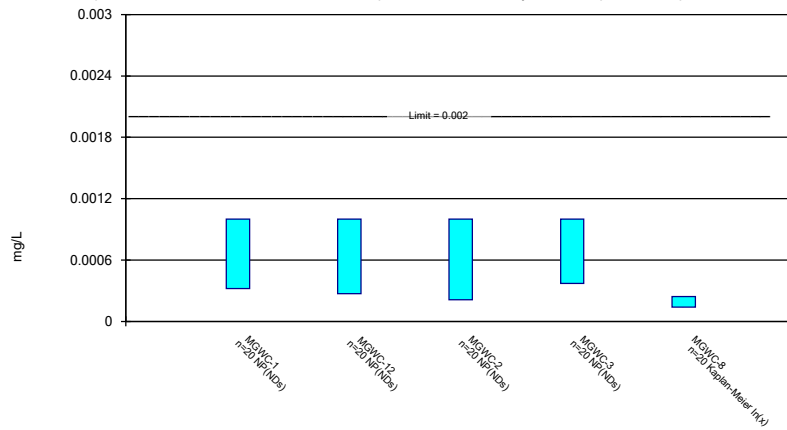
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 3/23/2023 12:12 AM 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: Thallium Analysis Run 3/23/2023 12:12 AM View: Confidence Intervals  
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/23/2023 12:13 AM 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
2/7/2023	<0.002	<0.002	
2/8/2023			0.00051 (J)
Mean	0.001883	0.001906	0.001916
Std. Dev.	0.0003884	0.0004007	0.0003509
Upper Lim.	0.002	0.002	0.002
Lower Lim.	0.0015	0.0003	0.00197

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/23/2023 12:13 AM 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	<0.005	<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)
2/7/2023		0.00098 (J)		0.0018		
2/8/2023	0.0016		<0.001		<0.001	0.001
Mean	0.002353	0.001004	0.0009132	0.001579	0.0008186	0.0009
Std. Dev.	0.0008054	0.0003659	0.0001986	0.0003425	0.000281	0.000195
Upper Lim.	0.002785	0.001076	0.001	0.0017	0.0008144	0.001
Lower Lim.	0.00192	0.0006626	0.00068	0.00143	0.0005167	0.00099

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/23/2023 12:13 AM 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
2/7/2023		0.06		0.16		
2/8/2023	0.1		0.044		0.02	0.052
Mean	0.107	0.05754	0.05097	0.1483	0.0135	0.03711
Std. Dev.	0.01606	0.01378	0.005188	0.01302	0.006769	0.006254
Upper Lim.	0.11	0.06494	0.05376	0.1553	0.015	0.04016
Lower Lim.	0.096	0.05014	0.04819	0.1413	0.01	0.03374

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/23/2023 12:13 AM 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)
2/7/2023		<0.0025	
2/8/2023	<0.0025		0.0002 (J)
Mean	0.002384	0.00239	0.001232
Std. Dev.	0.0005188	0.0004897	0.0007486
Upper Lim.	0.0025	0.0025	0.001658
Lower Lim.	0.00018	0.00031	0.0008074

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/23/2023 12:13 AM 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
2/8/2023	0.00012 (J)	0.0021 (J)	<0.0025	0.0018 (J)
Mean	0.001977	0.002326	0.002302	0.001578
Std. Dev.	0.0009893	0.001884	0.0006421	0.001177
Upper Lim.	0.0025	0.002982	0.0025	0.001423
Lower Lim.	0.0005	0.001229	0.00041	0.0005973

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/23/2023 12:13 AM 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
2/7/2023		0.0012 (J)		<0.002		
2/8/2023	0.0014 (J)		<0.002		0.0013 (J)	0.0013 (J)
Mean	0.00205	0.00337	0.002065	0.00205	0.00201	0.00202
Std. Dev.	0.0003887	0.006042	0.0002907	0.0002236	0.0003768	0.0002984
Upper Lim.	0.0036	0.0032	0.0033	0.003	0.0034	0.0031
Lower Lim.	0.0014	0.0012	0.002	0.002	0.0015	0.0013

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/23/2023 12:13 AM 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
2/7/2023		<0.0025		0.0025		
2/8/2023	<0.0025		0.0012 (J)		0.0044	0.0019 (J)
Mean	0.001755	0.002348	0.002788	0.0007673	0.008414	0.01148
Std. Dev.	0.001026	0.0005331	0.0008194	0.000478	0.002624	0.007789
Upper Lim.	0.0025	0.0025	0.003228	0.00068	0.009822	0.01566
Lower Lim.	0.00047	0.0015	0.002348	0.00051	0.007005	0.007296

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/23/2023 12:13 AM 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
2/7/2023		0.849		2.14		
2/8/2023	1.77		0.799		1.88	1.11
Mean	1.506	0.6123	0.5998	1.556	1.14	1.671
Std. Dev.	0.3905	0.28	0.2451	0.3608	0.3488	0.524
Upper Lim.	1.71	0.7626	0.7314	1.745	1.327	1.952
Lower Lim.	1.302	0.462	0.4682	1.368	0.9527	1.389



# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/23/2023 12:13 AM 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	<0.082
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	<0.082
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	<0.082
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)
2/7/2023		0.25		0.076 (J)		
2/8/2023	0.11		0.074 (J)		0.14	0.084 (J)
Mean	0.1851	0.218	0.1285	0.1262	0.2716	0.089
Std. Dev.	0.08068	0.05902	0.05953	0.05951	0.1033	0.03324
Upper Lim.	0.2296	0.251	0.2	0.2	0.3286	0.1073
Lower Lim.	0.1406	0.1966	0.075	0.079	0.2146	0.07066

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/23/2023 12:13 AM 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
2/7/2023	<0.001		
2/8/2023		<0.001	<0.001
Mean	0.00095	0.0008722	0.0009567
Std. Dev.	0.0002121	0.0002947	0.0001838
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	0.0003	0.00022

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/23/2023 12:13 AM 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)		<0.05	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
2/7/2023		0.024		0.014		
2/8/2023	0.01		0.0065		0.14	0.012
Mean	0.01124	0.01934	0.00669	0.01246	0.1224	0.03137
Std. Dev.	0.001875	0.00524	0.0042	0.001808	0.01965	0.01089
Upper Lim.	0.01225	0.02215	0.0066	0.01343	0.13	0.03721
Lower Lim.	0.01023	0.01652	0.0051	0.01149	0.112	0.02552

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/23/2023 12:13 AM 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
2/7/2023	<0.0002		<0.0002		
2/8/2023		<0.0002		<0.0002	0.00026
Mean	0.000188	0.0001889	0.0001935	0.000194	0.0004189
Std. Dev.	3.699E-05	3.435E-05	2.907E-05	2.683E-05	0.0008595
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.00026
Lower Lim.	8.6E-05	0.0001	7E-05	8E-05	0.00014

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/23/2023 12:13 AM 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	<0.075	<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	<0.075	<0.015	<0.015	<0.015
1/29/2019	<0.075	<0.015	<0.015	<0.015
1/28/2020		<0.015	<0.015	
1/29/2020	0.0015 (J)			<0.015
3/10/2020	<0.075	<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
2/7/2023		<0.015		
2/8/2023	0.0012 (J)		<0.015	<0.015
Mean	0.01621	0.01093	0.01443	0.01443
Std. Dev.	0.03016	0.00639	0.002569	0.002527
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 3/23/2023 12:13 AM 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
2/7/2023		<0.005		<0.005		
2/8/2023	<0.005		<0.005		<0.005	<0.005
Mean	0.004719	0.004704	0.004716	0.004715	0.004704	0.003961
Std. Dev.	0.001125	0.001182	0.001137	0.00114	0.001185	0.001915
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 3/23/2023 12:13 AM 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
2/7/2023		<0.001		<0.001	
2/8/2023	<0.001		<0.001		<0.001
Mean	0.0007903	0.000921	0.0009605	0.0009265	0.0004595
Std. Dev.	0.0003752	0.0002439	0.0001766	0.0002288	0.0003726
Upper Lim.	0.001	0.001	0.001	0.001	0.0002436
Lower Lim.	0.00032	0.00027	0.00021	0.00037	0.0001385

FIGURE I.



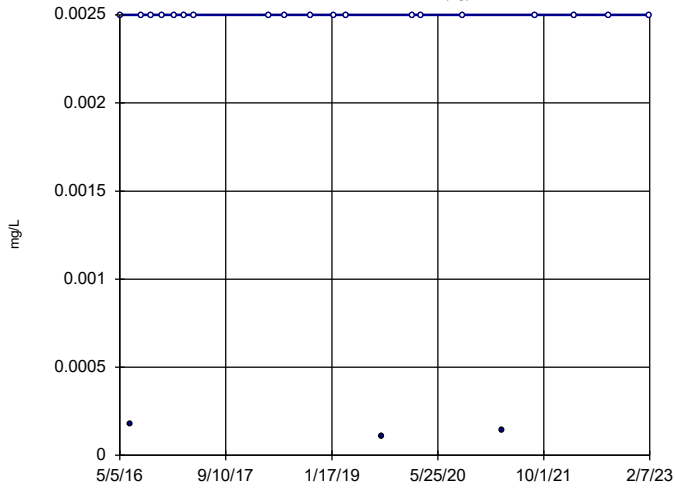
# Appendix IV Trend Tests - All Results (No Significant)

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/23/2023, 12:49 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	MGWA-10 (bg)	0	0	92	No	22	86.36	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	21	92	No	22	95.45	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	18	87	No	21	95.24	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	-34	-92	No	22	40.91	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWA-6A (bg)	0.00003862	4	34	No	11	18.18	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-7	-0.0005723	-79	-92	No	22	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	MGWC-8	0.003015	88	92	No	22	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-10 (bg)	0.00005878	14	92	No	22	4.545	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0008379	42	92	No	22	0	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0003427	57	92	No	22	4.545	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6 (bg)	0	5	92	No	22	95.45	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.0001001	-28	-34	No	11	63.64	n/a	n/a	0.01	NP
Lithium (mg/L)	MGWC-7	0	27	92	No	22	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator

MGWA-10 (bg)

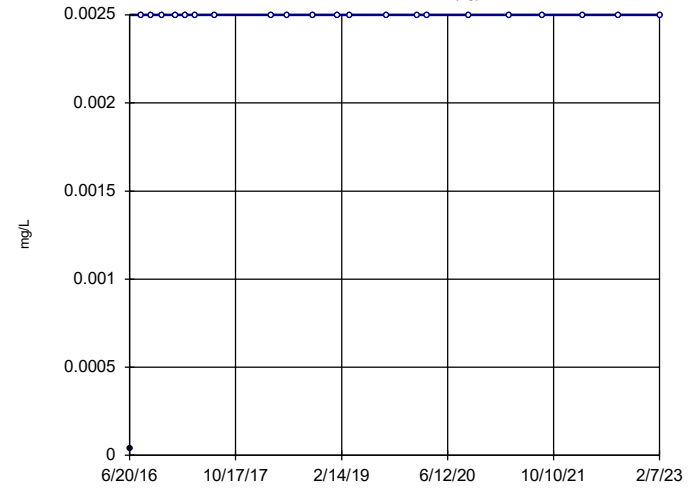


n = 22  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 0  
critical = 92  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Cobalt Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-11 (bg)

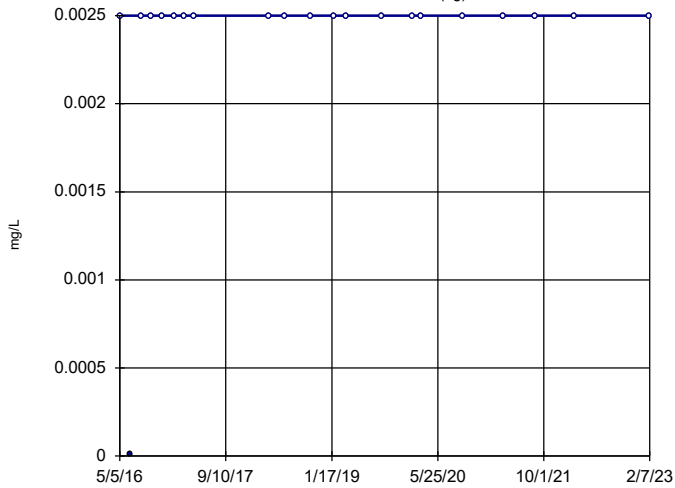


n = 22  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 21  
critical = 92  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Cobalt Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-5 (bg)

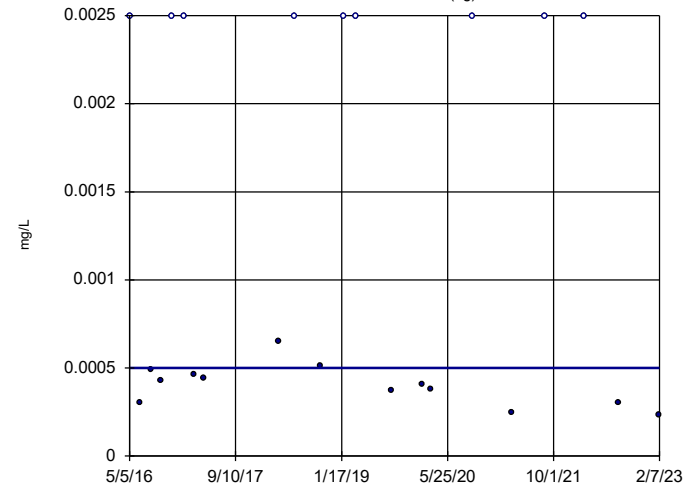


n = 21  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 18  
critical = 87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Cobalt Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6 (bg)

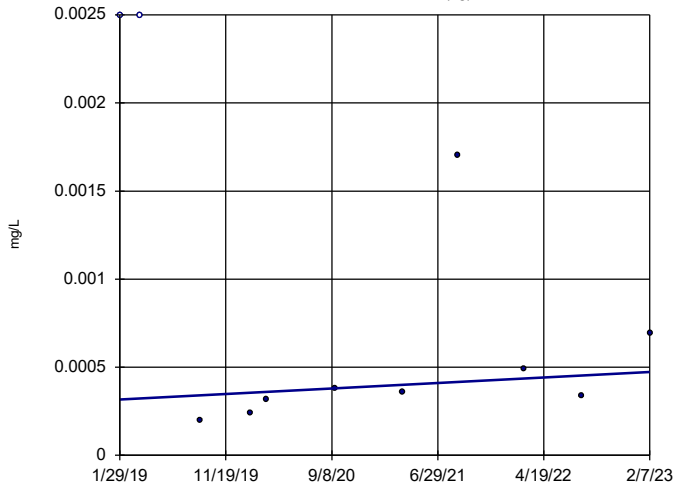


n = 22  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = -34  
critical = -92  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Cobalt Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-6A (bg)

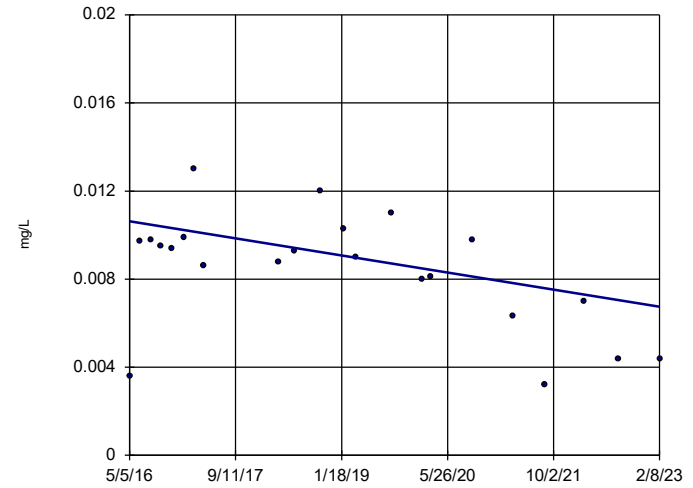


n = 11  
Slope = 0.00003862  
units per year.  
Mann-Kendall  
statistic = 4  
critical = 34  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Cobalt Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWC-7

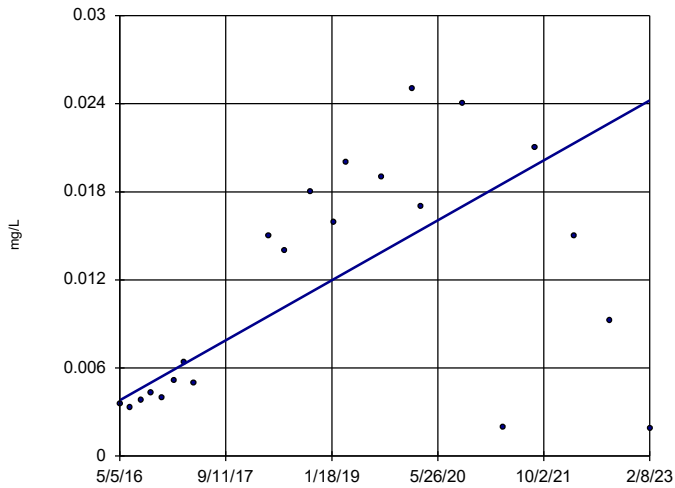


n = 22  
Slope = -0.0005723  
units per year.  
Mann-Kendall  
statistic = -79  
critical = -92  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Cobalt Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWC-8

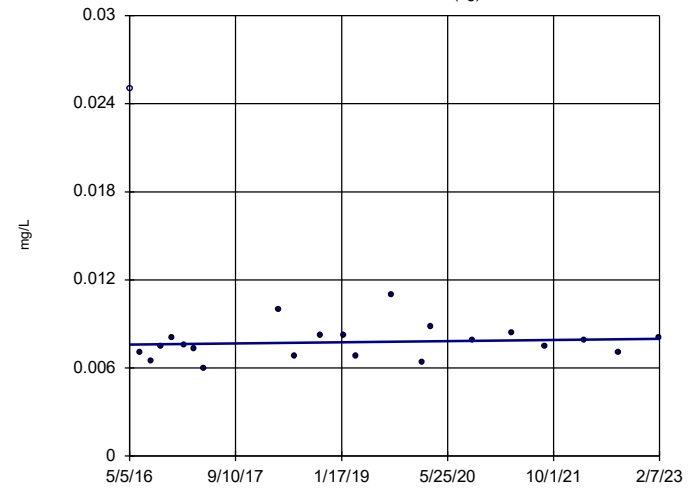


n = 22  
Slope = 0.003015  
units per year.  
Mann-Kendall  
statistic = 88  
critical = 92  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Cobalt Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

### Sen's Slope Estimator

MGWA-10 (bg)



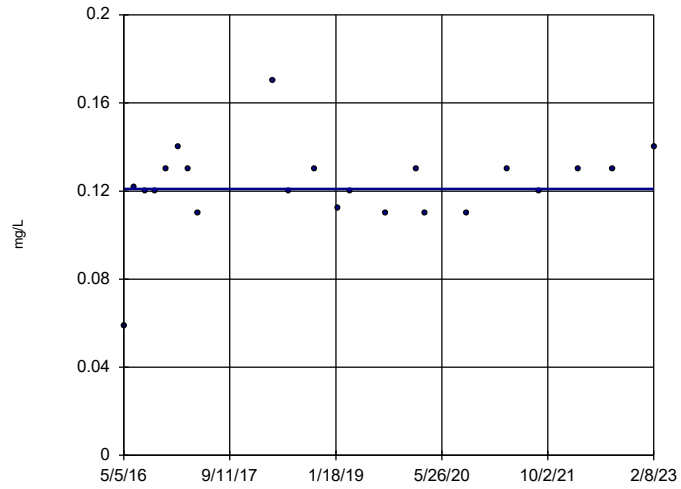
n = 22  
Slope = 0.00005878  
units per year.  
Mann-Kendall  
statistic = 14  
critical = 92  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Lithium Analysis Run 3/23/2023 12:42 AM View: Appendix IV - Trend Test  
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond



### Sen's Slope Estimator

MGWC-7



n = 22  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 27  
critical = 92  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Lithium    Analysis Run 3/23/2023 12:43 AM    View: Appendix IV - Trend Test  
Plant McIntosh    Client: Southern Company    Data: McIntosh Ash Pond



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